KONARAK

BY

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KONARAK

1. GENERAL INFORMATION

ORISSA, UNLIKE MANY OTHER PARTS OF INDIA, has the prized distinction of possessing an uninterrupted series of temples illustrating the history of the well-defined Kaliṅga Order from its inception to decline. And the Sun temple of Konarak (pl. IV) marks the highest point of achievement of that Order. Even in its present ruined state (for, it lost its soaring tower long ago), it stands in majestic dignity in the midst of a vast stretch of sand and desolate solitude which further emphasize its greatness.

The magnitude of the edifice and the stupendous size of its perfectly-proportioned structure are matched by the endless wealth of decoration on its body—from minute patterns in bas-relief executed with a jeweller's precision to boldly-modelled free-standing sculptures of exceptionally large size. Architecture and sculpture go hand in hand in Indian temples; but both, with their full efflorescence at Konarak, cohere in this temple completely with a total concept. Under the overwhelming shadow of the colossal structure does one breathe the enchanting air emanating from the sculptures.

Konarak (lat. 19° 53′ N.; 86° 06′ E.) is a small village in Puri District, within 3 km. of the Bay of Bengal. It can be reached from either Bhubaneswar or Puri, both important stations of the South-eastern Railway. From Pipli on the north-to-south highway

between Bhubaneswar and Puri (21 km. from the former and 40 km. from the latter), a 45-km. long road leads one, past Nimapara and Gop, to Konarak in the south-east. The road-distance is thus 66 km. from Bhubaneswar and 85 km. from Puri. The rivers, that this road crosses, have been recently bridged, and the place is now accessible throughout the year.

While it is usual to return to Bhubaneswar or Puri, as the case may be, after a one-day programme at Konarak, the visitor intending to stay at Konarak overnight may do so at the local Inspection Bungalow, which can be reserved through the Executive Engineer, Public Works Department, Bhubaneswar Division, Bhubaneswar. The Government of India Tourist Bungalow provides additional accommodation to the tourists.

Guide-books and picture-postcards are available both at the site and in the office of the Conservation Assistant, Archaeological Survey of India, Bhubaneswar. Photographs of monuments and sculptures can be had on payment from the office of the Superintending Archaeologist, Archaeological Survey of India, 32 Chittaranjan Avenue, Calcutta 12.

2. INTRODUCTION

A. Legends and history

THE NAME KONARAK IS THE POPULAR FORM OF Koṇārka. Like Bhubaneswar, the name is evidently derived from the name of the presiding deity Koṇārka, which means the *Arka* ('Sun') of *koṇa* ('corner'), the latter presumably being in relation to Trikoṇā (p. 6), in the corner direction of which the temple was erected. The main temple (Temple 1) was called by early European mariners as the Black Pagoda,[1] in contradistinction to the White Pagoda (the whitewashed temple of Jagannātha) of Puri, both important landmarks in their coastal voyage.

Legends, as embodied in the *Kapila-Saṁhitā*, the *Mādalā-pāñji* (chronicle of the Jagannātha temple at Puri) and the *Prāchī-māhātmya*, take the sanctity of Konarak back to mythical times. The legends of these late texts are an obvious adaptation of a much earlier tradition as recorded in the *Bhavishya-Purāṇa* and *Sāmba-Purāṇa*. According to these *Purāṇas*, Sāmba, son of Kṛishṇa and his wife Jāmbavatī, was very proud of his handsome person and once ridiculed the divine sage Nārada, who, mischief-maker that he even ordinarily was, took recourse to an unsaintly scheme to avenge himself. By a cunning device he led Sāmba to the bathing-place of his step-mothers, who were struck with his personal charm. Slipping quietly the sage led Kṛishṇa to this spot. Incensed at his son's apparent lack of propriety, Kṛishṇa cursed him to be smitten with leprosy which would affect

[1] *The Diaries (1675-1680) of Sir Streynsham Master* (ed. by Sir Richard Carnac Temple and published in 1911 under Indian Record Series), I, p. 56, and II, p. 93.

his beauty. Sāmba proved his innocence, but the curse once pronounced could not be withdrawn. He was, however, directed to repair to Mitravana near the Chandrabhāgā, where he was to propitiate Sūrya, the healer of all skin diseases. Sāmba acted upon the advice. After twelve years of severe penance he succeeded in pleasing the god and was cured of his illness. In gratitude, he decided then and there to erect a temple in honour of the god. While bathing in the Chandrabhāgā the following day he discovered an image of the god, which had been fashioned out of Sūrya's body by Viśvakarmā. Sāmba installed this image in a temple built by him in Mitravana.[1]

According to the *Bhavishya-Purāṇa*, the original locale of the episode was near the Chandrabhāgā (the Chenab in Punjab), the well-known tributary of the Indus. This spot came to be known after Sāmba as Sāmbapura or Mūla-Sāmbapura (i.e. 'the original Sāmbapura'), modern Multan, the Sun temple of which finds a glowing description in the account of Hiuen Tsang. The shifting of the legend to Konarak was done obviously at a period when the locality became a centre of Sūrya-worship, the motive behind it being, no doubt, to augment the sanctity and fame of the new centre by making it the site of Sāmba's original temple. A shallow pool of water, immediately by the side of the sea and within 3 km. of the temple, is known as the Chandrabhāgā, where even now crowds of pilgrims take a purificatory bath before sunrise on the seventh day (*saptamī*) of the bright half of the month of

[1] According to the *Bhavishya-Purāṇa*, Sāmba had to import some Maga families (the Magi, the sun-worshippers of Iran) from Śakadvīpa, as the local Brāhmaṇas did not agree to worship the image. Certain alien features (e.g. boots) in the Sūrya-images of northern India are due to the influence of these foreign immigrants.

Māgha (January-February).[1] It is likely that the pool is the choked-up mouth of a dried stream, as the appearance of a silted-up channel is marked even now by a long shallow depression in the ground running by the side of the temple and ending in the pool itself. It is not known if the name Chandrabhāgā was original or a borrowed one.

According to an unpublished manuscript of the *Mādalā-pāñji*,[2] a temple of Koṇārka-deva was built in the Arka-kshetra by Purandara-kesarī of the Kesarī dynasty, who also founded eight *śāsanas* (villages granted by the king to the Brāhmaṇas) for the worship of the god. The rulers of the Gaṅga dynasty, who ousted the Kesarīs, also paid homage to the deity, and one of these rulers, Anaṅgabhīma, even increased the amount for the service of the deity from 42500 cowries to 52500.[3] This king promised to enlarge the temple of Purushottamadeva at Puri but could not accomplish it. To relieve him of the sin of failing in his promise, his son and successor, Narasiṁhadeva, erected, through

[1] These people, after bathing, would wait on the beach till they can see the red ball of the rising sun spring out of the blue sea. Then they proceed to the temple where they worship the *nava-grahas* (nine planets). A fair also takes place on this occasion. Once in the year the deserted holy place of Sūrya thus throbs with religious emotion. This is probably a survival of an ancient practice following the construction of the temple. *Māgha-saptamī* is mentioned in the *Mādalā-pāñji* as one of the festivals of this holy centre. It is also referred to in the *Brahma-Purāṇa* in connexion with the description of Koṇārka.

[2] Bishan Swarup, *Konarka* (1910), pp. 5 ff.

[3] The items of expenditure met out of this amount are also detailed. They include, besides offerings and daily service to the deity, amounts spent on the worship of the various deities of the holy centre, including Māyādevī, Ashṭa-Śambhus, Ashṭa-Chaṇḍīs, Aruṇa, four *dvāra-pālas* (door-keepers) and divinities of the earth, water and sky, for Chandrabhāgā-*tīrtha*, festivals like *Māgha-saptamī* and *dvādaśa-yātrās* (car-festivals) and the *sevakas* (professional worshippers).

his *pātra* (officer) Śiva Sāmantarāya Mahāpātra, a temple in front of the one built by Purandara-kesarī and installed in it the image of the earlier temple. He also endowed it with rich offerings and lands. Many of his descendants also honoured the deity. After the death of Mukundarāja (A.D. 1559-68), the *yavanas* (Muslims) made a destructive attempt on the temple, but failing in the mission carried off the copper *kalaśa* and the crowning *padma-dhvaja*.

The reliability of the *Mādalā-pāñji* is generally questioned. But the nucleus of truth behind the above statement is substantially supported by other sources. The copper-plates of the successors of the Gaṅga King Narasiṁhadeva (*circa* A.D. 1238-64), son of Anaṅgabhīma III, rarely fail to mention the supreme achievement of Narasiṁha as the builder of a *mahat-kuṭīra* ('great cottage') of Ushṇaraśmi (Sūrya) in the corner of Trikoṇā[1] (*Trikoṇā - koṇe kuṭīrakam=achīkarad=Ushṇaraśmeḥ*). That this temple (Temple 1) was built in front of an earlier temple of Sūrya (Temple 2) is also borne out by circumstantial evidence (below, p. 86). The statement that the image of the earlier temple was re-installed in the later temple also fits in well with the small pedestal inside the later temple. The missing image, to judge by the pedestal, was a small one, which is rather unbecoming in the colossal temple. The historicity of Purandara-kesarī is yet to be established unless he is to be identified, which is not unlikely, with the Somavaṁśī Purañjaya (end of the eleventh century), grandson of Udyotakesarī and brother of Karṇa.

[1] Trikoṇā may be identified with Tikonā (lat. 19°51′ N.; long. 86°01′ E.) on the bank of the Kushbhadra, nearly 9 km. south-west of the Konarak temple. The existence of the ancient habitation of Tikonā during the Gaṅga rule is attested to by several Gaṅga *fanams* which were found in course of digging-operations and shown to the author at the time of her visit to the village.

There is no evidence to explain the selection of the site for building the temple. We have to assume that either the place enjoyed religious sanctity from before or, being on the sea-coast, it (rather Trikoṇā) had commercial importance.

The purpose of erecting this stupendous temple is unknown. Sūrya is believed to be the healer of diseases and the bestower of wishes from very early times; and it is not unlikely that the temple is a worthy thanksgiving of the powerful ruler following either his recovery or the fulfilment of his prayer perhaps for a healthy son. That he had some genuine regard for this deity is shown by the name of his son Bhānudeva, the first solar name in that royal line. We should also remember in this connexion that the builder of this temple, Narasiṁha, was traditionally known as *lāṅguliā* ('one having a tail'), the exact significance of which is not known. The explanation that he had a protuberance of the spinal cord seems to suggest that he had a physical deformity of some kind or other, of which he wanted to get cured by building a temple of Sūrya. Some scholars, however, surmise that the monument was erected as a memorial by the ambitious monarch after his successful campaign against the Muslims.

That the fame of this temple as a wonderful monument had spread far beyond the limits of Orissa in the sixteenth century is amply borne out not only by the great Vaishṇava saint Chaitanya's (A.D. 1486-1533) visit to the place but also by the following pithy description which appeared in the *Ā'īn-i-Akbarī* of Abu'l-Faḍl, the famous chronicler of the court of Akbar (A.D. 1556-1605).

'Near Jagannāth is a temple dedicated to the Sun. Its cost was defrayed by twelve years revenue of the province. Even those whose judgment is critical and

who are difficult to please stand astonished at its sight. The height of the wall is 150 cubits high and 19 thick. It has three portals. The eastern has carved upon it the figures of two finely designed elephants, each of them carrying a man upon his trunk. The western bears sculptures of two horsemen with trappings and ornaments and an attendant. The northern has two tigers, each of which is rampant upon an elephant that it has overpowered. In front is an octagonal column of black stone, 50 yards high. When nine flights of steps are passed, a spacious court appears with a large arch of stone upon which are carved the sun and other planets. Around them are a variety of worshippers of every class, each after its manner with bowed heads, standing, sitting, prostrate, laughing, weeping, lost in amaze or in wrapt attention and following these are divers musicians and strange animals which never existed but in imagination. It is said that somewhat over 730 years ago, Rāja Narsing Deo completed this stupendous fabric and left this mighty memorial to posterity. Twenty-eight temples stand in its vicinity; six before the entrance and twenty-two without the enclosure, each of which has its separate legend.'[1]

This description of the monument is substantially true except the directions of portals in front of which stood the pairs of elephants, horses and lions-on-elephants. Abu'l-Faḍl is silent about the actual state of preservation, and it seems that time had not yet extended its destructive grip on the sanctuary.

According to the manuscript[2] of the *Mādalā-pāñji* mentioned above (p. 5), which gives in detail the history of the temple, Mahārāja Narasiṁhadeva

[1] H. S. Jarrett and Jadu-nath Sarkar, '*Ain-i-Ākbari*, II (Calcutta, 1949), pp. 140 and 141.

[2] *Jour. Asiatic Soc. Bengal*, New Series, IV (1908), pp. 322 f.; Bishan Swarup, *op. cit.*, pp. 5-8.

(the third king of the Bhoi dynasty of Khurda), son of Mahārāja Purushottamadeva, went from Puri to see the temple in his ninth *aṅka* (A.D. 1628), when Bākhar Khān was ruling the *sūbā* of Orissa on behalf of Shāh Salīm[1] (Jahāngīr), the emperor of Delhi. Before this date, due to the violence of this *yavana* ruler the enshrined image of the Sun, called Maitrāditya-Viriñchideva, had been removed to Nilādri-mahotsava temple within the enclosure of the Purushottama temple (Jagannātha temple) of Puri. The Mahārāja got the empty temple measured by Nātha Mahāpātra, the officer in charge of the supervision of the buildings of the Purushottama temple. The measurements were taken with a stick (*kāṭhi*) in length equal to 28 *āṅgulas* (width of fingers) of the hand of the Mahārāja. The measurements of the main *deul* (sanctuary) along with the *siṁhāsana* inside it, *mukha-śālā* (porch) and Aruṇa-*stambha* are also detailed in the manuscript.

Though no evidence is forthcoming in support of this text, the record does not look entirely unfounded. In the details of the measurements it is mentioned that the once-existing *kalaśa* and the lotus-finial, the *padma-dhvaja*, were broken, though the iron rod, called *chumbaka-luhā-dhāraṇā* ('magnetic iron rod'), which passed through the *kalaśa*, was still in position. This *kalaśa*, which was of copper,[2] and the lotus-finial are said to have been carried away by the *yavanas* when they attacked this temple after the reign of

[1] This is evidently a mistake for Shāh Jahān, as Salīm (Jahāngīr) died in November, 1627.

[2] The popular legend is that a magnetic *kalaśa* on the top of the tower used to draw ashore the vessels passing along the coast of Konarak, whereupon the crew of a ship scaled the top and removed this *kalaśa*. Following this violation of sanctity, the priests removed the image of the deity to Puri.

Mukundarāja. In the eighteenth century the chlorite pillar (p. 80), called Aruṇa-*stambha* (pl. XXI), was removed to Puri by the Marāṭhās who planted it in its present site in front of the temple of Jagannātha.

Various speculations have been made as to the possible cause of the collapse of the tower of the sanctuary of Temple 1. Some ascribe it to the subsidence of the foundation and others to a shock of earthquake or lightning, some again doubting if the temple was ever completed. The theory of non-completion is untenable in view of the platform and the spouted pedestal of the enshrined image in the sanctum bearing indubitable signs of their having been in religious use for a considerable time (p. 75), even if we disbelieve the above account of Narasiṁhadeva. At no part of the plinth is there any sign of sinking or unequal settlement because of weak foundation. The extant walls and other structures within the enclosure, again, do not evince the effect of any seismic commotion. Lightning can also hardly affect such a massive edifice, though the small members like the crowning elements may be easily liable to damage. It appears that the structure crumbled down gradually, the beginning of the decay initiated by the desecration of the temple. As already noted, the enshrined image was removed to Puri due to the Muslims who probably violated the sanctity of the temple either by their entry into it —it is obvious from the account of Abu'l-Faḍl that the temple succeeded in arousing the curiosity of even the Muslims— or by the removal of the *dhvaja* and the *kalaśa* made of copper.[1] Thus, forsaken by the presiding deity, the deserted temple fell naturally

[1] It is not known if it was gilded and destroyed under the impression of its being of gold or if the motive was simply to desecrate the temple.

into utter neglect. Consequently, it was not deemed necessary to attend to the occasional structural repairs and to remove the trees which must have taken roots in it and thus unloosened the fabric. This must have been the main cause of the decay, which was possibly accelerated by the fall of the capping stones. The *kalaśa* had already been dislodged before 1628. Evidently, it was followed by the fall of the *khapuri* and the enormous *amlā* which by their heavy weight had kept in position the corbelled walls of which the spire was made. Made of several slabs connected together by iron dowels and cramps, the *amlā* dropped into pieces when the iron members on exposure (after the washing away of the plaster) corroded and split the stones into fragments (action being more disastrous on an easily-weathered rock like khondalite of which the temple was built). With the displacement of the *amlā* and the *beki* below it, was lost the heavy weight to counterbalance the tendency of the corbelled spire to fall in, with the result that the stones of the dry masonry started gradually dropping.

As already suggested, the decay was gradual. Even in 1848 a corner of the tower existed to a considerable height. Thus, A. Stirling, who went to the site shortly before 1825, wrote that a small section 'still remains standing, about one hundred and twenty feet in height, which viewed from a distance gives to the ruin a singular appearance, something resembling that of a ship under sail.'[1] Fergusson, who visited the temple in 1837 and prepared a drawing (pl.I) of it, estimated the height of the fragment, an angle, of the sanctuary as 140 (42·672 m.) to 150 ft. (45·72 m.),[2] though Kittoe, who came here only after a year, writes that

[1] *Asiatick Researches*, XV (Serampore, 1825), p. 326.

[2] *Picturesque Illustrations of Ancient Architecture in Hindostan* (London, 1848), p. 27.

'one corner is still standing to the height of 80 (24·384 m.) or 100 feet (30·48 m.) and has (at a distance) the appearance of a crooked column'.[1] This strip, too, of the tower, was thrown down by a strong gale in October 1848,[2] so that at the time of Rajendralala's visit in 1868 the sanctuary was reduced to 'an enormous mass of stones (pl. II) studded with a few pipal trees here and there'.[3]

The lower ceiling of the porch of Temple 1, supported by iron beams, and the pillars, which sustained the beams had caved in even before the visit of Stirling. The platform along with other structures including the *bhoga-maṇḍapa* (below, p. 81) must have been engulfed by the drifting sand also before Stirling, who would not have failed to mention the exquisite wheels and horses had they been visible during his time. But at least a large portion of the eastern stair was free of sand even in 1815 when the artist of Colin Mackenzie prepared a drawing of the northern face of the eastern stair and the adjoining terrace, which shows two wheels and a pair of horses.[4]

Though the destructive forces of nature have not been equally operative on the porch (pl. II), the latter has greatly suffered at the greedy hands of man. The leading part in despoiling it of its facing stones was taken by a Rājā of Khurda[5] who was particularly after the chlorite slabs, though the local people were also not inactive in removing the fallen stones and taking out iron cramps and dowels, which held the

[1] *Jour. Asiatic Soc. Bengal*, VII, part II (1838), p. 681.

[2] Bishan Swarup, *op. cit.*, p. 98.

[3] *Antiquities of Orissa*, II (Calcutta, 1880), p. 150.

[4] *Jour. Asiatic Soc. Bengal*, New Series, IV(1908), pp. 306 and 324.

[5] A large erotic sculpture, evidently forming part of the spoil, was presented in 1924 by a member of this family, Rājā Rāmachandra Dev of Puri, to the Indian Museum, Calcutta.

facing stones together, for the sake of metal. 'Latterly some of the finest sculptures from the doorways of the building itself', notes Fergusson, 'have been removed by the Kurdah Raja to decorate a temple he is building in his own fort; and the temple itself had a narrow escape from being employed to build a lighthouse on False Point.'[1] Even more vivid is the description of this callous and ruthless operation from the pen of Kittoe, another eye-witness. 'The *Kúrda* rája has demolished all three entrances and is removing the stones to *Pooree*; the masons pick out the figures and throw them down to take their chance of being broken to pieces, (which most of them are;) such they leave on the spot, those that escape uninjured are taken away. The elegant doorway called the *Nawagriha*, a drawing (pl. III A) of which is to be found in the 15th Vol. of the Asiatick Researches, has been completely destroyed.'[2] Thus, the eastern architrave containing the *nava-grahas* (below, p. 57; pls. XII and XIII), which Stirling and possibly Fergusson saw in position, was brought down before 1838. Fortunately before the Rājā could remove it to Puri, the Government directed him in that very year not to remove any more stones from the site.[3]

B. Conservation

The measures, which have been adopted for the conservation of the temple (pl. II), are so extensive that they have become a part of the history of the monument itself.

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[1] *Picturesque Illustrations of Ancient Architecture in Hindostan* (London, 1848), p. 28.

[2] *Jour. Asiatic Soc. Bengal*, VII, part II (1838), pp. 681 f.

[3] *Orissa Historical Research Jour.*, VII, no. 1 (1958), p.59, n.

Curiously enough, the first suggestion for the conservation of the temple came not from the antiquarian but from the Marine Board which requested, in 1806, the Vice-President in Council, Fort William, not only to take measures against the removal of stones but also to furnish an estimate of cost for the preservation of the edifice. The move for repairs arose out of a purely utilitarian motive, as the temple, called the Black Pagoda by European mariners, served as an essential landmark on the shallow coast of Orissa. But the Governor General did not agree to the proposal of conservation in view of the heavy expenditure involved, though he directed the Magistrate of Cuttack to prevent removal of stones.

Had the Government listened to the advice of the Marine Board, a portion of the tower could perhaps have been saved for posterity, for the sanctuary had stood nearly 3 m. higher than the porch till the strong gale of 1848 reduced it to a massive heap of stones (p. 12). The second move, again futile, for repairs cropped up when the Government was aroused to a sense of its responsibility towards this famous 'Government property' by the Asiatic Society of Bengal after the depradations of the Rājā of Khurda (p. 13). The Deputy Governor of Bengal, however, declined to interfere with the temple, except in the case of spoliation and injury by individuals.

As the Government did not take steps for restoring the dismantled stones to their position, it was proposed, in 1859, by the Asiatic Society of Bengal to remove the dislodged *nava-graha* architrave to the Indian Museum in Calcutta. The initial attempt for the transport of the piece in 1867, however, failed, as the grant of Rs. 3000 was barely sufficient for laying a tram-road. The money was exhausted after the architrave had been carried to a short distance, just

outside the south-eastern corner of the enclosure; the sea by which the stone was to be despatched would have been about 3 km. away still.

Following his visit to Konarak, Sir Ashley Eden, Lieutenant-Governor of Bengal, suggested some repairs at a small outlay. Accordingly, in 1881, the Bengal Government instructed the Public Works Department to take measures to arrest further decay of the temple and to place the stone animals on rough pedestals. Besides jungle-clearance, the only work done in 1882-83 was that the colossal pairs of elephants (pl. XIX), horses (pl. XX) and lions-on-elephants (pp. 78-80), which had originally stood in front of the three staircases of the porch and were at that time lying fallen amidst débris, were mounted on masonry platforms in front of, but some metres away from, the respective staircases. Unfortunately, they were set in wrong positions with their faces towards the temple instead of away from it. To make the matter still worse, the two lions-on-elephants had been erected on the top of a mound, which on clearance of sand later, revealed a large pillared hall, *bhoga-maṇḍapa*. Thus, the hope raised by Sir Ashley Eden's interest in the monument remained unfulfilled. Even the little work done was not carried out properly.

In 1892, the question of repairs cropped up once more when the Lieutenant-Governor Sir Charles A. Elliot, following his visit to the temple, felt the necessity of its inspection by a competent engineer to suggest suitable measures for its conservation. He was also inclined to grant a moderate sum for the upkeep of the buildings by jungle-clearance and for buttressing the hanging parts and also for collection and transportation of the fallen sculptures including the *nava-graha* architrave to the Indian Museum. Accordingly,

a second attempt was made to bring the *nava-graha* architrave to Calcutta. To make it lighter for carriage, the stone was sliced longitudinally into two halves. Leaving the uncarved back portion at the spot, the carved front slice was loaded on a specially-made truck and carried some metres further towards Telikood Creek, where, it was intended, along with thirteen small sculptured stones fallen from the temple, to be loaded on a barge for Calcutta. In 1893, the Bengal Government, considering the objection of the local people on religious grounds, ordered the Public Works Department not to touch it in future, so that the slab had been left there till the second decade of the present century when it was shifted to the sculpture-shed. The thirteen sculptured pieces, however, were brought to Calcutta in 1894 and are now in the Indian Museum. The Superintending Engineer inspected the temple, and estimates were prepared for partly filling up with dry stonework the interior of the porch and propping up its roof, then standing dangerously, and also for the clearance of stones from inside so as to give a firm base for the dry stonework. No structural repairs, however, were carried out, as the Government accepted the views of the Superintending Engineer who was against interfering with the porch and suggested that the jungle should be cleared up annually. Accordingly, the temple was brought on the books of the Public Works Department, the Superintending Engineer was instructed to carry out the necessary annual maintenance and the District Magistrate was asked to arrange for an occasional patrol of police to see that no injury was done to the temple.

The proposal of the Lieutenant-Governor for the clearance of the mound of débris behind the porch was also not implemented, as the Superintending Engineer thought it inadvisable to interfere with

the mound of débris which was buttressing the back wall of the porch.

Thus, nearly a full century was wasted by vacillation as regards the propriety of saving the temple at an unreasonable cost and by downright neglect which threatened the very existence of the temple, though the Government was aroused to a sense of its responsibility towards it from time to time and occasionally a Lieutenant-Governor, in an access of enlightenment and moved by the compelling grandeur of the monument, was inclined to spare a small sum leading to few sporadic works amounting to little.

The visit of Sir John Woodburn, the Lieutenant-Governor, to Konarak, in December 1900, put an end to this stalemate and augured bright prospects for the temple. Fully impressed with the necessity and urgency of the structural repairs to the shattering fabric of the temple by supplying missing stones and restoring the fallen pieces to the original spots, he issued an order to the effect. Shortly afterwards, in February 1901, T. Bloch, Archaeological Surveyor of the Bengal Circle, submitted a note to the Government of Bengal suggesting the unearthing of the buried portion of the temple and the compound-wall, the clearance of sand from the compound, the refixing of the broken mouldings on the walls of the porch and the preservation of the portions standing in a dangerous position. The Government of Bengal accepted the suggestions, and an estimate was prepared almost immediately for clearing the sand around the porch and the compound-wall and excavating rubbish and stones from the basement of the porch. As early as April 1901 was exposed a wheel by excavating a trench at the base of the porch.

The year 1901 was thus a memorable year in the life of the temple, as it witnessed for the first time the

firm launching of a well-planned campaign to save the temple at any cost by adopting suitable measures with keen archaeological conscience. The problems which faced the conservators were enormous: the premises around the temple had to be cleared of not only a deep accumulation of sand but also stones, many of which were of gigantic size; the tottering fabric of the porch on the point of collapse had to be given a fresh lease of life by structural repairs; and the extant portion of the sanctuary had to be exposed out of the huge pile of fallen stones and consolidated by suitable steps. To make matters worse, many of the stones were highly disintegrated and crumbling into pieces. The conservators—the Executive Engineer, the Assistant Engineer and the Sub-Divisional Officer of the Orissa Circle—advised by the Archaeological Surveyor, Director General of Archaeology and Superintendent of Archaeological Survey of the Eastern Circle, laudably proved themselves equal to their task and within a span of ten years were able to rescue whatever of this stupendous fabric had survived.

The clearance of sand and stones on three sides of the porch gradually brought to light the superb berm along with horses and wheels and several structures including the *bhoga-maṇḍapa* (pl. XXII), the interior of which could not be cleared immediately due to the lions-on-elephants planted erroneously on its top in 1882-83 (p. 15). These operations thus revealed for the first time that Konarak comprised not merely a single temple but a whole complex of temples as noted by Abu'l-Faḍl. Portions of the enclosure along with its east gate, too, were traced to a small depth. The compound-wall was found greatly robbed of its stones, and only at one spot were noticed a few battlements *in situ*.

Along with the work of clearance was taken up the extremely tough and risky job of conserving the badly-shattered porch. Stripped of facing stones at many places, a large part of the exterior was overhanging dangerously. Stones from the inner side of the ceiling, which was threatening to give way, were falling every now and then and endangering the very life of the workers. To prevent its collapse, it was decided to fill in the interior permanently. Thus, after repairing the damaged portion of the ceiling, a $4\frac{1}{2}$-m. thick lining of dry masonry was erected along its interior walls, the space left in the centre up to the top being filled in with sand. In the beginning, the sand-filling was effected through the northern door, the only door kept open for the purpose. Then this door, too, was sealed for ever. Filling next continued through the hole caused in the roof by the fall of the sanctuary-tower (p. 12) and finally through a hole, 13 cm. in diameter and 7·62 m. in length, drilled vertically from the top. Externally, large-scale stone-work was done to support the overhanging parts and to restore the missing stones. All traces of the southern door vanished with the construction of a buttressing wall of ashlar masonry, as this portion had been badly damaged by the spoliation of the Rājā of Khurda as well as by the fall of the spire of the sanctuary. The loose stones were re-set in their original position. The essential works for conserving the porch was completed in 1905. In 1906-07 the damaged cornice over the eastern door was secured by building corbelled abutments below and some patch masonry work done on the west face of the porch.

The two lions-on-elephants, installed on the top of the *bhoga-maṇḍapa* (p. 15), were gently brought down and planted not in their original position but in front of the eastern staircase of this very structure.

The removal of sand and débris from inside this edifice revealed not only its true character but also a fine chlorite image of Sūrya leaning against one of its carved pillars. This image, which is now in the National Museum, New Delhi, tallies in size with the two *pārśva-devatās* of Temple 2 (below, p. 93).

The clearance of the mammoth pile of débris to the west of the porch was taken up towards the end of 1905. This brought to light not only the existing portion of the sanctuary with three chlorite images of the *pārśva-devatās* and the carved platform (pl. XVIII A) inside the sanctum sanctorum, but also a large number of chlorite sculptures, most of which were originally within the *muṇḍis* of the *bāḍa*. The security of the *parśva-devatās* was ensured by building niches around them. As the entrance to the sanctum was blocked with the filling of the porch, an access to it was provided by a flight of steps from the extant top of its west wall.

Along with these works was taken up, in 1906, a large-scale plantation of the casuarina and *poonang* trees in the direction of the sea, so as to check the advance of the drifting sand and thereby to minimize the effect of the abrasive action of the sand-laden winds.

The removal of sand and débris behind the sanctuary exposed, in 1909, the extant portion of a beautiful temple, Temple 2 (now called Māyādevī temple), completely except a portion of its plinth. The two images of the *pārśva-devatās*, which were exposed in the operations, were encased in rebuilt niches. To the south-west of Temple 2 were encountered scanty traces of a small brick structure.

Thus, by 1910 the initial task of conservation, incorporating all the items essential for rendering the monument stable, was completed at a cost of nearly a lakh of rupees.

Attention to the monuments continued even afterwards, and by 1922 all the major structural repairs like the rebuilding of the wall-tops of the sanctuary of Temples 1 and 2 and the *bhoga-maṇḍapa* and making them watertight by laying concrete on the exposed tops, repairs to the walls of the sanctum of Temple 1, supporting the *śrī* of its porch, the restoration of missing stones and pointing the open joints were more or less complete. More casuarina trees were planted. Sand and fallen stones continued to be removed. Lightning-conductors were also fixed, while a sculpture-shed was constructed in 1915 to house the images and other important carved pieces.

Since then small-scale repairs, like the clearance of vegetation, re-setting of loose stones, pointing and filling in the crevices were effected annually till 1953. Temples 1 and 2 also received chemical treatment by way of removal of moss and lichen, elimination of injurious salts by the application of paper-pulp and fungicidal treatment for some years beginning with 1938-39. Till 1938 the conservation was the responsibility of the provincial Public Works Department, the Archaeological Survey of India working only in an inspecting and advising capacity. Since 1939, the works have been carried out departmentally by the Survey.

The monument was inspected in 1949 by the Executive Engineer of the Department, who observed certain major damages. It was felt, even after the sustained work for half a century, which had, no doubt, rendered the temple stable to an appreciable extent, that large-scale repairs and chemical treatment were still needed. In 1950, the Government of India appointed a committee of experts on archaeological conservation, engineering, art, architecture, geology and chemistry to go into the whole question of the

preservation of the monuments and to find out appropriate measures for prolonging its life. The principal recommendations of the Committee were: (i) the testing of humidity contents inside the sealed porch of Temple 1; (ii) making of the entire Temple 1 watertight from outside by grouting, filling in of joints, rectification of wrong slopes and concreting the tops of the irregular masonry; (iii) removal of sand from the compound with necessary provision for drainage of water; (iv) rebuilding of the damaged compound-wall to the height of the original coping; (v) chemical treatment of the surface; and (vi) planting of a thick belt of casuarina and cashew-nut trees in the direction of the sea so as to produce a screening and shielding effect for the temple both from sand-drift and consequent attrition.

The Committee met for the second time in 1953 and since then the recommendations have been persistently followed up by the Survey.

The complete clearance of sand from inside the enclosure has, apart from bringing the compound to its original floor-level, revealed a few features never before suspected—a well pertaining to the kitchen block, the south gateway and a Vaishṇava brick temple (Temple 3). The removal of sand necessitated the underpinning of the platforms of the horses and elephants by ramps of coursed masonry. Sand was further removed from the ground in front of the east gateway, the original main entrance to the temple-complex, and the slopes stabilized by stone pitching. A strip of nearly 6 m. along the outer periphery of the compound-wall was cleared of stones and the level of the sand reduced to the level of the coping of the compound-wall.

The missing portions of the compound-wall were restored to the height of the bottom course of the

coping, the damaged portions repaired and the open joints pointed.

The old lime terracing on the wall-tops of the sanctuary was replaced by a fresh 7½-cm. thick lime concrete mixed with cement and ironite (as a water-proofing material), to the proportion of 1 lime, 2 sand, 4 stone chips, 1/8 cement and 15 lbs. (6·8039 kg.) of ironite per cft. (·028317 cubic metre) of lime. Some other areas on the broken and uneven part of the walls were similarly concreted.

In order to stop the pooling and soakage of rain-water in the first and second terraces of the porch, all deep and wide joints and depressions were filled in with concreted mortar, the proportion of the mortar being identical with that of the terracing. All the joints were repointed. The rectification of wrong slopes for the easy flow of rain-water by chiselling the stones of these terraces was also effected with the result that the formation of puddles of water on these terraces is no longer possible.

Both the eastern and southern gateways were thoroughly conserved by restoring the missing stones, pointing the open joints and replacing the damaged plain and moulded courses by new ones made after the original. Appropriate steps were also taken to preserve Temple 3.

Exposed rusty iron clamps and dowels were replaced by copper ones.

Several pockets in the berm of Temple 1 were filled in with masonry of khondalite to arrest the stagnation of water.

The plantation of trees is being vigorously pursued by the Forest Department. It has already minimized considerably the sand-drifts and the effect of the salt-laden sea-wind.

The *nava-graha* architrave was removed to a new

shed beyond the north-east corner of the enclosure. The practice of besmearing the slab with vermilion and oil has been stopped in the new building.

The removal of the stonework, constructed during earlier conservation, from the passage between the sanctum and the porch has revealed the exquisitely-carved chlorite door-frame of the sanctum.

The filling in of all invisible interstices in the core of the masonry, including that of the plinth, has been completed. This has been done by drilling holes into the masonry and forcing into them under 40 lbs. (18·1437 kg.) of air pressure per square inch (6·4516 sq. cm.) liquid mortar in the proportion of 1 cement, 2 sand and 10 lbs. (4·53592 kg.) of ironite per cft. (·028317 cubic metre) of cement.

Extensive chemical cleaning and preservation of the façade from top to bottom of the porch has been taken in hand.

Located in the courtyard of the temple, the sculpture-shed not only imparted a discordant note but was inadequate for the display of sculptures according to the requirements of a museum. A spacious museum building has, therefore, been recently constructed by the side of the Government of India Tourist Bungalow.

C. Architecture

As stated already, the temple (Temple 1) of Konarak is not an isolated monument standing on its own peculiarities. Gorgeously conceived as a colossal chariot (pls. IV and V) drawn on twelve pairs of exquisite wheels by a team of seven richly-caparisoned horses in spirited gallops and symbolizing the Sun-god himself as if emerging from the depth of the blue expanse, the temple, of epic imagination and vastness, is the supreme realization, through ceaseless

architectural experiments, of the creative upsurge that fired the architects of Orissa since the seventh century A.D. It marked the peak of efflorescence of the entire Orissan movement and was also the brightest flicker of a dying lamp.

The lavishly-ornamented wheels (pl. VI) are carved against the sides of a high berm, on which the sanctuary and its attached front porch are built, and also on the two sides of the east staircase that gives access to the top of the berm immediately in front of the main entrance of the porch. The rearing horses are sculptured against the sides of this staircase, but they are in the van.

The resemblance to a chariot ends with the wheels and horses. The rest of the edifice is a typical Orissan temple consisting of a *deul* (sanctuary) and a *jagamohana* (porch) with all the component parts fully evolved, but all built on a titanic scale.

The sanctuary proper is a *rekha deul* (also called *baḍa deul*, 'the big temple') characterized by a curvilinear tower (fig. 1), while the frontal porch (*mukha-śālā*), called *jagamohana* or *bhadra deul*, where the devotees assemble, is a *piḍā deul*, the roof of which is made of *piḍās* or horizontal platforms (fig. 2). Built on a common berm, both the structures are square internally. But the exterior is variegated into a *pañcha-ratha* plan by projections known in Orissan *Śilpa-śāstras* as *rathas* or *pagas*, which afford an effective interplay of light and shade. The central projection, which is the most pronounced, is called *rāhā*, while the next two, both on one plane but projecting forward beyond the extreme ends, called *kanika* or *kanika-paga*, are known as *anuratha*. These projections are carried up to the base of the crowning elements. Besides these major projections, there are numerous inconspicuous offsets and recesses.

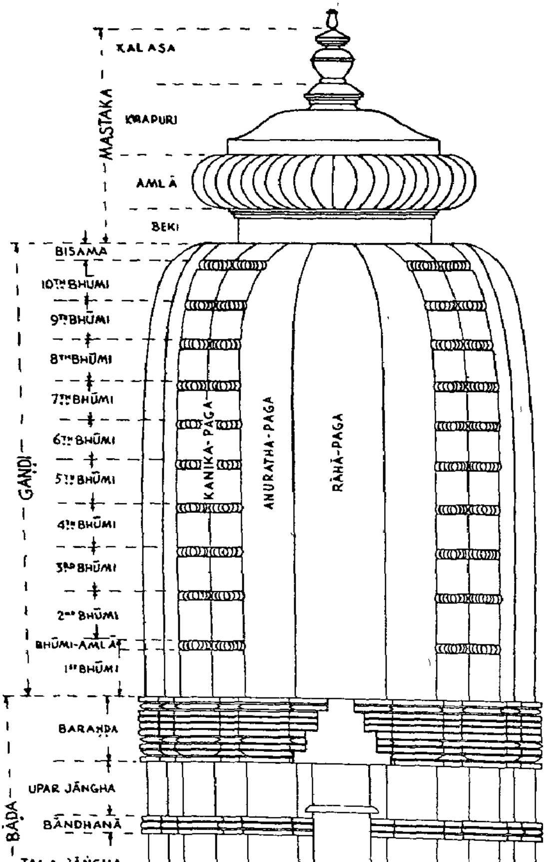

FIG. 1. *Principal components of a typically Orissan rekha deul*
(After the Liṅgarāja temple, Bhubaneswar)

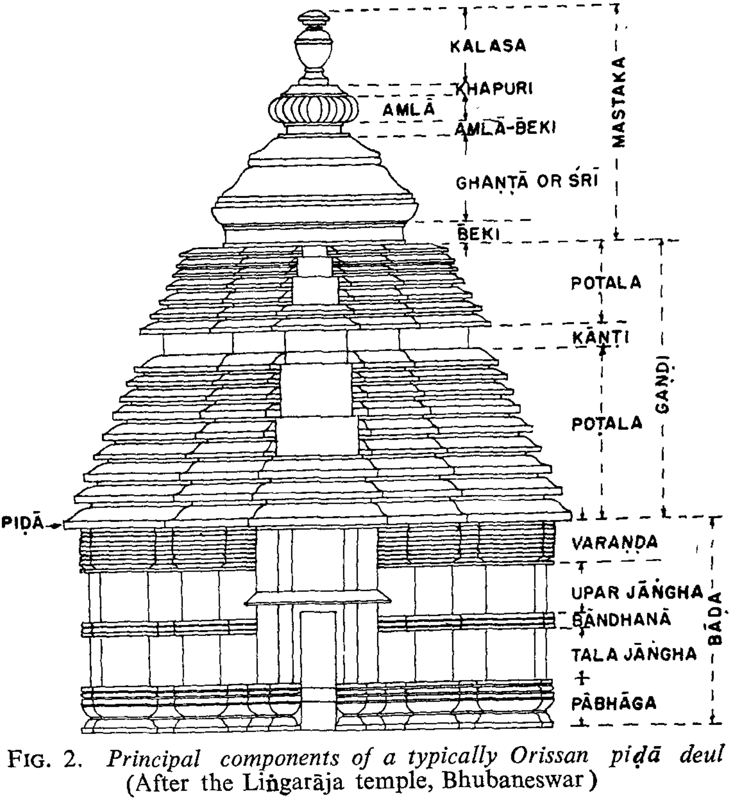

FIG. 2. *Principal components of a typically Orissan piḍā deul* (After the Liṅgarāja temple, Bhubaneswar)

Both the sanctuary and the porch are divided into four broad parts along the vertical plane, namely *pishṭa* (platform), *bāḍa* (vertical wall), *gaṇḍi* ('trunk of a body'; the curvilinear tower in the case of a *rekha deul* and the pyramidal roof in the case of a *piḍā deul*) and *mastaka* ('head'; crowning elements). While the *mastaka* is circular in cross-section, the *bāḍa* and *gaṇḍi* are square internally in horizontal sections.

Three of the four divisions again are composed of several elements.[1] All these components are in perfect symphony with one another and combine harmoniously in a masterly architectural conception as a whole. Some of these elements are named after human limbs. It has been suggested on the basis of these terms that the temple was likened to the human body. The *rekha deul* has sometimes been conceived by the Orissan architects as a male temple and the *piḍā jagamohana* as a female.

Up to the top of the *bāḍa* there is hardly any difference between the sanctuary and the porch except in the matter of relative proportions, but with the *gaṇḍi* they assume their individuality. Both the *bāḍas* are thus composed of five components, namely, *pābhāga* ('foot') consisting of a set of five broad mouldings at the base, *tala jāṅgha* ('lower shin'), *bāndhanā* ('bond'; a set of mouldings which divides *jāṅgha* into two, *tala* and *upar*), *upar jāṅgha* ('upper shin') and *varaṇḍa*, again a set of mouldings, numbering ten in the porch.

The roof of the porch is in the form of a stepped pyramid truncated near the top and is made up of *piḍās*, arranged into three tiers, called *poṭalas*, separated from one another by a recessed vertical wall called *kāṇṭhi* or *kāṇṭi*. Over the roof is the *mastaka*, which is a succession of a *beki* or *beka* ('neck'), *śrī* (ribbed bell-shaped member) or *ghaṇṭā*, *amlā-beki*, *amlā* (gadrooned or fluted oblate spheroid resembling an *āmalaka* fruit), *khapuri* ('skull'; flattish bell-shaped member), *kalaśa* ('water-pot') and *āyudha* (sacred weapon or emblem), the last two now missing. The crowning elements are arranged effectively in such a way that they complete the shape of the truncated pyramid.

[1] Each part of a temple, even to the smallest moulding, has a prescribed name in the Orissan *Śilpa-śāstras*.

The entire *gaṇḍi* along with a large part of the *bāḍa* of the sanctuary caved in long ago. As the extant portions conform to the corresponding parts of the contemporary temples of Yameśvara and Ananta-Vāsudeva of Bhubaneswar, it may be presumed that the *varaṇḍa* had ten mouldings, the *kanika* of the *gaṇḍi* was subdivided into ten *bhūmis* (planes or storeys), demarcated by *bhūmi-amlās*, the *anuratha* had miniature representations of a *rekha deul* in vertical succession, the *rāhā* had an interlacings of *chaitya*-window motifs besides projecting lions or lions-on-elephants (p. 68) and the crowning elements consisted of a succession of a *beki*, *amlā*, *khapuri*, *kalaśa* and *dhvaja*.

In front of the eastern staircase of the porch, but separated by an open space where the *dhvaja-stambha* (p. 80) had originally stood, is a pillared structure (pl. XXII), the *bhoga-maṇḍapa* (p. 81). Thus, the general layout of the complex is similar to that of the Yameśvara temple of Bhubaneswar. As in the latter, the porches in front of the *pārśva-devatās* (pp. 69-71), who occupy the niches of the central projections of the sanctuary, are parts of one unified scheme and are not later additions like those of the Liṅgarāja temple at Bhubaneswar.

The sanctum is now open to the sky. To presume from other Orissan temples, there were several *mudas* (ceilings) tying the four walls at regular intervals. The blind chamber over the bottom ceiling (*garbha-muda*) was accessible by roughly-cut steps provided over the ceiling of the passage leading to the sanctum. The *mudas*, which presumably rested on corbels, were reinforced by gigantic iron beams, oblong in section. These beams were made of a number of iron rods heated and welded together, the surface being beaten smooth.

Three kinds of stones were used in the structures.

While the use of chlorite was limited to the door-frame and a few sculptures, laterite was used in the invisible core of the platform and staircases besides the foundation. The rest was built of a poor quality of khondalite. The selection of this easily-weathered garnetiferous felspathic gneiss proved fatal to the monument. In many places the constituent felspar has been altered to kaolinic and serpentinous material and the garnet has been decomposed to a spongy mass of oxide. None of these three kinds of stones are available in the vicinity. No doubt, it was a Herculean feat to transport the colossal quantity of heavy stones from a distance of many miles and to lift and set in position the prodigious blocks at a height of nearly 61 m. in an age not favoured with modern mechanical inventions. Evidently, the stones were transported by rafts along distributaries in this part of the delta. The Chandrabhāgā, now died up, possibly served as the last artery of transport. The method of carrying stones at the work-spot is illustrated on a panel[1] fixed on the temple of Siddha-Mahāvīra near Puri. Here the labourers are seen carrying poles, from which stones are suspended by means of ropes, along a wooden ramp supported on posts. The dependence was, thus, principally on human labour; yet, the possibility of the use of simple contrivances like pulleys, wooden wheels or rollers for lifting the heavy stones to heights cannot be entirely ruled out.

The masonry is ashlar. The facing stones are smoothly finished and fitted together so finely that the joints are hardly visible. The stones were laid dry evenly and horizontally one upon another and kept in position by their weight and balance, aided by iron cramps and dowels. The inner filling was not in the

[1] N. K. Bose, 'A temple under construction' *Jour. Ind. Soc. Oriental Art*, XIII (1945), pp. 196-98.

least neglected. Though mortar was not used in the joints, a plaster of lime and sand was applied to the body to a large extent.

From some unfinished carvings it is clear that the designs were carved *in situ* only after the stones had been fixed in position.

D. Sculptural art

The exterior walls of the entire edifice from the base of the *upāna* to the top of the *gaṇḍi* are embellished with an amazing amount of bold sculptures and delicate carvings, the inert stone thus enlivened into an inspired orgy of sculptural magnificence. No doubt, the artisans 'built like Titans and finished like jewellers'. Despite its richness and exuberance, the sculpture not only does not dominate the architecture but actually serves to emphasize the supreme majesty of the temple.

The themes of the embellishments may broadly be classified into: (i) deities (pl. XVII A); (ii) musician-nymphs (pls. XV and XVI) of the celestial spheres; (iii) secular sculptures (pls. VII A and C, IX, X and XIV B); (iv) birds, beasts, aquatic animals and composite and mythological figures including *nāgas* (pl. VII B), *nāgīs* and *virālas* sometimes with the head of an elephant or demon; (v) architectural motifs like *piḍā-muṇḍis* (fig. 3, A), *khākharā-muṇḍis* (fig. 3, B), *vajra-muṇḍis* (fig. 3, C), pilasters, mouldings, *chaitya*-windows, trellis, etc.; and (vi) purely decorative patterns woven out of floral, plant and geometrical motifs. The secular sculptures include beautiful *alasa-kanyās* ('indolent damsels') vaunting their voluptuous beauty in seductive poses, musicians and dancers, love (pls. IX and X), both sublime and sensual, in greatly moving forms and above all a fairly large

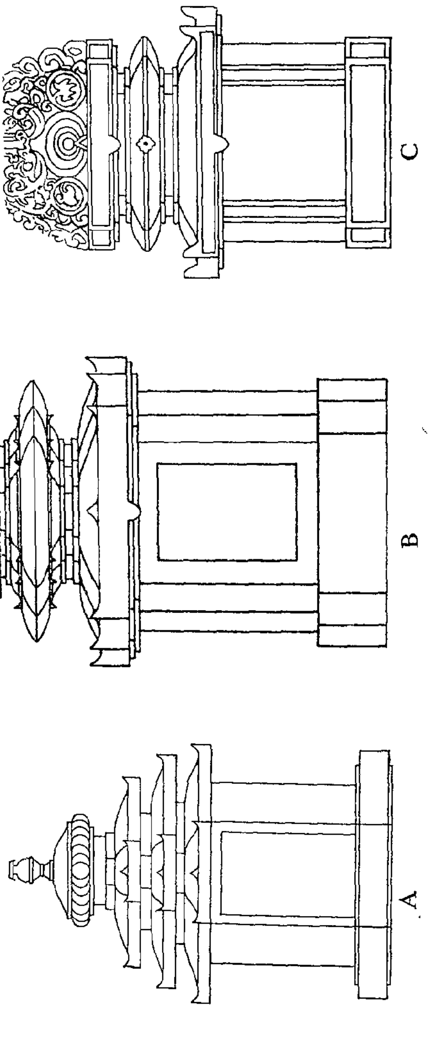

FIG. 3. A, *piḍā-muṇḍi;* B, *khākharā-muṇḍi;* and, C, *vajra-muṇḍi*

number of secular themes. That the main pivot of the last was the king and facets of his daily life including his deeds, both trivial and great, his war and peace, his life both within the palace and outside, his amusements and his engagements, both temporal and spiritual, is everywhere patently obvious, the number of *genre* sculptures (pl. VII A) being extremely rare. The profusion of the drama of royal hunts and processions and military scenes from whole army—infantry, cavalry and elephants marching in full accoutrement and war-steeds ruthlessly crushing an enemy under their hoofs—speaks in no unmistakable phrases that the edifice is the realization of the dazzling dream of an ambitious and mighty king, secular to the core and with immense zest for life, who wanted an edifice which would outrival the works of his forbears and immortalize his name. The joy of a princely life on earth and expression of the luxuriousness prevailing in the royal environment are writ large everywhere. The carvers were so much busy in carrying out with unending patience the deliberate designs of the king, in imprinting the king and in perpetuating on stone the subjects which pleased him that they had little scope or choice in recording the daily life of the common people who toiled hard and poured their very souls to make the vast building project a supreme achievement. The vision of the king, whose personality has been fully reflected in these secular sculptures, has thus been completely fulfilled.

A word is necessary on the flagrantly-erotic sculptures of Konarak, which, by their character, large size and enormous number, cannot fail to draw the attention of the visitor. A strong sensual element is almost ubiquitous in the art of different places and times. Life in its voluptuously physical aspects is depicted on the terracottas of as early as the Śuṅga

period (second and first centuries B.C.). Again, amorous adventures and the frank statement of the most earthly aspects were never a taboo in old literature. To the artist art is amoral. Apart from Konarak and many other temples of Orissa, there are centres where it plays a prominent part in temple-decoration. There does not seem to exist any canonical injunction on the occurrence of erotic sculptures on temples. No popular explanation (for example, their being the outcome of a desire to ward off lightning or the evil eye) carries convictions. No less doubtful are such modern pseudo-spiritual explanations as that the sculptures were intended to test the devotees, so that only those who remained psychologically unaffected by them were considered eligible to enter the sanctum sanctorum. Nor can the sculptures be regarded as illustrating the *Kāma-śāstras* (erotic texts) or Tantric practices and perversions. Any plausible explanation must take into account their possible historical developments from the simple and amorous *mithunas* (couples) occurring on early temples. The artist has impartially depicted all the *rasas* (sentiments) and has in no way emphasized *śṛiṅgāra* (erotics) over others. In any case, the fact stands out that the sculptor, in interespersing such sculptures with divine and other figures, did not give them any preferential or derogatory treatment, and similar must have been the attitude of the devotee who visited the temple for worship. Obviously obtrusive and shocking to the modern eye, the ancients must have accorded sanction to such overt and uninhibited expression of eroticism for some reason or other and taken the manifestations of the primordial impulse in a natural way.

A study of the sculptures and reliefs of Temple 1 reveals that there are marked differences both in the

style and artistic quality of various groups of sculptures. This is natural in a monumental edifice like this where several hundred artists must have worked, all of them perhaps not belonging to one school. It is further apparent that the important sculptures were finished by the master-sculptors, while the others were left to their pupils and apprentices. The workmanship, thus, ranges from mediocre to a high pitch of excellence.

Thus, the free-standing celestial nymphs (pls. XV and XVI) of rather over life-size on the first and second terraces of the porch are superb in execution. With fully-developed bodies, swelling busts, rounded hips, amplitude of modelling, delicate curves, effective rhythmic action of the limbs and divinely ecstatic face and with an expression of grace and elegance, these figures, executed fully in the round, play on various instruments in honour of the Great Splendour that illumines the world. In their ecstasy, all of them, except the player on *vīṇā*, cannot restrain their feet from dancing. These musicians were, no doubt, the creation of a master of superb plastic imagination and high aesthetic vision and with a wonderful feeling for fluid form. The artist has succeeded completely in giving form to his inner aesthetic realization.

The workmanship of the almost life-sized elephants (pl. XIX) and war-steeds (pl. XX), which guarded the northern and southern stairs of the porch, is also of a high calibre. The dramatic vitality and exuberant drive of the latter are as much compelling as the plasticity and strength of the former. Elephants, as a rule, received excellent treatment in the hands of the artists. The flesh is rendered with wonderful realism. The dramatic composition and the plastic quality of the elephants in file on the *upāna* are also exquisite. The animals are shown in a variety of actions. The violent protest during *khedā*-operations

is expressed as effectively as the calm resignation to bondage at the hands of man.

Again, the assured hand of an artist with an exquisite feel for the body is discernible in the large erotic sculptures (pl. IX), evidently carved with inspiration. Pulsating with the warmth of human emotion, most of these figures, with inherently superb sculptural qualities, exhibit a rare sensitiveness and abandon of feeling.

Some of the vivacious *kanyās*, particularly the large ones, are remarkable for their pliability, subtlety of modelling, luxuriousness of appearance and voluptuous charms, expressed in a wide variety of engaging gestures.

The fingers of the artist who carved the chlorite *pārśva-devatās* (pl. XVII A) were both deft and precise. The majestic figures, despite their dignified modelling, are, however, formal and rigid, as their author, who had little scope in giving form to his plastic conception and aesthetic vision in respect of cult-images, had to labour under the convention of fashioning the deities in conformity with the canonical formulae. Yet, the sublime smile, expressive of ineffable peace, that plays on the benign face, is amazing.

Juxtaposed against these *chef-d'œuvres* is the *cliché* of conventionalized figures of men and women carved on the faces of the berm. Lacking in expression, most of these figures are rendered with poor modelling. Evidently, they are the copies of unimaginative apprentices with a thin aesthetic vision.

The *bhoga-maṇḍapa* is characterized by an unrestrained abundance of plastic embellishment (pl. XXIII). The latter does not have the effect of richness and elegance equal to that of the temple. The decorative instinct of the artist—evidently a mediocre—has prepossessed him so deeply that he is blind to the total effect of the assemblage. One rather feels tired with the monotonous over-ornamentation, lack of balanced

composition and mediocre quality in the sculpture. The themes are more limited than in the case of the main temple and hardly introduce any new topic. The most recurring subject is the dancers and musicians with their joy and abandon expressed rather in too eloquent a fashion.

3. THE MONUMENTS

A. Temple 1 (main temple-complex)

As already noted, the main temple-complex consists of a sanctuary, its attached porch and an isolated pillared edifice. Erected on an impressive berm, the sanctuary and the porch[1] are the two components of a single unified architectural scheme, the whole fabric being designed as the celestial chariot (pls. IV and V) of the Sun-god who is believed in Hindu mythology to course across the sky in a chariot of seven horses. The twelve pairs of wheels, which possibly symbolize the twelve months, of this earthly chariot are carved against the three sides of the berm and two sides of the front (east) staircase, the latter having further by its sides, but in the van, seven (three on the northern flank and four on the southern) admirably-sculptured galloping horses, fully caparisoned and spurred to run the colossal car. Below the berm and the staircases is a low *upāna*, with a narrow ledge-like projection, around which is a paved apron. Three broad flights of steps, facing the north, south and east doors of the porch, lead to the top of the berm.

The upāna

The façade of the *upāna*, which has at intervals

[1] The height of the porch from the base of the *upāna* to the top of the extant portion of the *khapuri* is about 39 m. The original height of the sanctury (from the base of the *upāna*), to judge from the measurements of its surviving parts and its proportions in relation to the porch, must have been more than 61 m.

raised insets mostly relieved with ornate *chaitya*-windows, is richly treated with friezes, the latter framed by two horizontal bands, each with a central beaded string. These friezes are limited in themes. The most recurring motif comprises elephants[1] in their sylvan retreats—elephants in defile, uprooting trees and branches and calmly consuming them, sometimes putting food into the eager mouths of the young ones affectionately, giving birth, fondling the mates and the young ones, prankishly catching hold with the trunk one of the legs of the companion and in other similar peaceful feats and very rarely overpowering other animals. In one scene on the south face of the central projection of the south side some elephants are seen drinking water in a river infested with crocodiles, one of the latter mortally discomfited for its daring to attack one of the elephants. Some of the processions of these animals are not only graphic but magnificent.

This wild retreat is often intruded into by men coming stealthily with the object of capturing the elephants, the latter forming the prized possession of the ancient nobility. Indeed, the capture of elephants (pl. XVIII B) was a favourite motif with the artists of Konarak. It is done without or with a *khedā* (enclosure for catching elephants), this operation depicted in all minute details in numerous panels. In the former case the elephants are caught with the help of a noose thrown either round their neck by men in ambush on a tree or round the legs from the ground. In some dramatic scenes a number of persons are seen busy with the task, some putting nooses around the neck and legs of the protesting animal, while others are overpowering the poor creature with spears.

[1] The number of elephants depicted on the *upāna* alone in various contexts exceed seventeen hundred.

In the *khedā*-operations, the wild elephants are lured generally by tame elephants into a cage made for the purpose and then tamed. In a few friezes two persons, perched on a slanting wooden platform by the side of a cage, are seen hurting the entrapped stubborn animal with spears, evidently to bring it under submission. Some friezes depict a file of captured elephants, clamly resigned to their lot. Tied one with the other by a long rope and preceded by a troop of armed men or a band of musicians, these animal are meekly proceeding towards the destination, presumably the royal stable. In some scenes men are seen carrying provisions on yokes and a large ring-like object, the latter suspended from a rod held over the shoulder. Very rarely the elephant is the target of the arrow of a hunter.

Next in order of frequency are the military marches and processions, often depicted in a rhythmic composition. The fully-equipped army consists of elephants, cavalry and infantry, the chariot being conspicuously absent. Each war-elephant carries two men—the elephant-driver with a goad at the van and the warrior usually with a sword and a shield in the rear. The movement of the elephants is both vigorous and rhythmic. Sometimes the elephants are seen trampling under their legs other animals encountered during their march through the woods. The horse carries a single cavalier, armed either with a sword or a long spear; the latter would sometimes pierce an animal like boar, met accidentally on the way. The infantry is equipped either with a sword and a shield or with a long spear. The marching troops are sometimes accompanied by persons and beasts of burden, carrying provisions and supplies. In some processions is depicted a band of musicians, along with a horseman, an elephant carrying a warrior with a bow besides

the elephant-driver and a man with a long spear or staff.

Hunting of animals—generally the boar and deer and rarely lion—with either a bow and arrow or a spear seems to have been a favourite pastime of the warrior class. Often the hunter is the king himself, seated on horseback. His retinue usually consists of a bearer of an umbrella, the royal insignia, and foot-soldiers armed with swords and shields. The breath-taking vital moments in the hunting operations are often perpetuated on stone with great effect. Particularly dramatic are those scenes where the animals, chased by the king and running pell-mell at their top speed, are suddenly cornered by the king's followers coming from the opposite direction. In one scene a *vyādha* (hunter) couple is seen proceeding towards a herd of boars.

The subject of a few friezes is a caravan. The bearers of merchandise are usually animals, generally bullocks, but, in some scenes, men also carry commodities along with the beasts of burden. The journey is not always smooth and the caravan is sometimes surprised by a band of armed bandits. One of the scenes of the journey, depicted on the northern face of the central projection of the north side, acts as a great relief on the monotonous repetitions. Pervaded by an atmosphere of domesticity, it depicts the party halting near a grove for the preparation of a meal. In the extreme dexter a woman, seated on a low wooden seat, is attending to the fire put inside a double oven, on which are placed two cooking-vessels. Behind her is a heavily-loaded bullock-cart at rest, with the animals unyoked. To the sinister of the cart is a standing man. Behind him is another lady attending to a double oven on which are perched again two cooking-pots. To the sinister is

a figure engaged in cutting vegetables with the help of a long cutter fitted to a wooden seat. Behind this figure is a standing figure pounding grains (or husking rice) with a large wooden mortar (*udūkhala*).

Noteworthy among the remaining themes are a contest in which a long rope is seen being pulled by a row of athletes as in a tug of war (on the south face below the south staircase) and an encounter. The latter is depicted on the west face of the central projection of the northern side. An armed prince on horseback with an umbrella-bearer in front is here taken by surprise by two cavaliers. Behind him is a queen (to judge from the umbrellas) with a child in her lap inside a round palanquin (*dolā*) carried by men.

Among the animals carved on the *upāna*, the presence of a giraffe on the south face is noteworthy.

The berm

Like the *bāḍa* of the fully-developed Orissan *rekha* and *piḍā* temples, the façade (pl. VI) of the berm (over 4 m. high) and the sides of the three stairways have five clear-cut horizontal divisions. The lowest division consists, as in the *pābhāga* of the temples, of five mouldings, namely, *khurā*, *kumbha*, *paṭā*, *kaṇi* and *basanta*. These mouldings are connected at intervals by vertical bands, relieved with creepers and scroll-work, their bottoms ending in a *chaitya*-window motif. The *muhāṇṭi* of the *khurā*, the lowest moulding, and the *basanta*, the top moulding, are richly carved with leaves bordered by two bands, each with a central beaded string. In the remaining portion of the *khurā* is a series of lotus-petals, each alternating with a beaded pendant; this series is capped by a second, but plainer, series. The motif in the *paṭā* is a creeper accommodating in its foils flowers, leaves and various

animals. But for the *ṭāṅkus* at intervals, the *kaṇi* is plain.

The next division corresponds to the lower *jāṅgha* of the *bāḍa*. It has pilaster-like upright slabs punctuated at close intervals with *khākharā-muṇḍis*, most of them set off with telling effect against a background of honeycomb pattern.

In the niches of the *khākharā-muṇḍis* are figures, variously engaged. Many of them are *kanyās* (damsels), shown as wringing water from the wet hair, waiting by the side of a half-opened door, standing under a tree, holding the branch of a tree, caressing a pet bird, doing her toilet, exhibiting her beauty, seated on a footed seat with hands busy on a *vīṇā*, being discomfited by monkeys who are after the bowl she is carrying and the like. One of the group-compositions, a *genre* one, is particularly touching. Carved on the south face of the central projection of the west side of the *deul*, it depicts the leave-taking of an old mother, presumably on the eve of her departure on a pilgrimage (pl. VII A). The mother, bent under age, tenderly blesses her son. The prostrate daughter-in-law is taking reverently the dust of her feet, while the grandchild fondly clings to her. The remaining figures are in other roles: a princely figure, seated in *lalitāsana* on a footed seat with a sceptre-like object in its left hand, being approached by others; a preceptor-like personage among his pupils and devotees; a man caressing his pet bird, a couple proceeding on foot; a standing ascetic; a man hunting either a boar or a lion; a warrior (armed with a sword and a large shield) with a woman with folded hands; a man with folded hands; a man with a yoke having loads hanging at both ends; an archer; a man caressing an animal; a man brandishing a sword towards a woman; a soldier looking at a mirror; a mother with her child; a man

with a sword; a female with a staff in her right hand and a bowl in her left, perched on the raised palms of a fierce-looking male; and comical, erotic and amorous figures. The meaning of one particular scene is not clear. Here a robeless woman (rarely a man) is seen standing with flames of fire between the legs. Similar scenes occur also on the upright slabs.

The upright slabs are boldly relieved usually with the following motifs:—

(i) Rampant *virāla* (Sanskrit *vyāla*), a leonine figure on an elephant—a characteristic embellishment of the Orissan temples. Sometimes it is shown with the head of either an elephant or a demon, springing over a fierce-looking demonish warrior. The theme of a lion pouncing upon an elephant finds parallel in Sanskrit literature, where the prowess of a lion is often indicated by describing it as breaking the temple of an elephant.

(ii) Erotic and amorous figures.

(iii) *Nāgas* (pl. VII B) or *nāgīs*, each with a human bust, a multi-hooded canopy and the tail of a serpent, coiling round a pillar. Generally single and sometimes double often in fond embrace (rarely with a third depicted below), these mythical beings are carved beautifully in various roles—playing on musical instruments like a drum, flute and *vīṇā*, with two palms joined as in *añjali-mudrā* (sometimes with a flower in the folded hands), with *ghaṭas*, flowers, garlands, rosaries and bowls of offerings and sometimes with arms crossed on the chests. With their pious looks, these figures, when represented singly, present a sharp contrast to the *kanyās*.

(iv) Beautiful *kanyās*, often lascivious and trying to show off their voluptuous beauty in various suggestive flexions—standing gracefully under a tree, playing rhythmically on musical instruments like a *vīṇā*,

cymbals and flute, holding the branch of a tree, adjusting her ear-stud, caressing her pet bird often perched on her arm or palm, standing in an alluring posture with two arms raised over her head, fondling a child or children, plucking flowers, allowing a goose to peck at a bunch held in her hand, in toilet, with arms crossed on the chest, with her forefinger placed below her mouth, carrying a sword, with a bowl, holding *chāmaras* (fly-whisk) and the like. The amusing plight of a woman disconcerted by a band of prankish monkeys, hankering after the bowl of delicious food which she is carrying on her head, is depicted on several slabs. In one the monkeys are seen devouring the contents of the vessel which is lying near the feet of the woman.

(v) Miscellaneous figures, depicted either alone or in a company, e.g. a boyish figure, sometimes carrying a cup-like object in its left hand, a man chastising a couple with a sword, a figure with folded hands, a person carrying a woman on the shoulder, a man playing on a drum (*pākhoāj*), an armed soldier with folded hands, a princely figure with two umbrellas held over the head by two dwarfish figures, a man leaning on a staff below a tree and a robeless woman with blazing fire between the legs.

In the *bāndhanā*, the third division, are three mouldings—*varaṇi*, *noli* and *basanta*. The first and the last have scroll-work having, within the foils, animals, birds, leaves and flowers, while the *noli* contains two series of lotus-petals with a central line of beads. The recess between the mouldings is relieved with honeycomb pattern. The mouldings are connected by vertical bands, the latter in line with the *khākharā-muṇḍis* of the lower *jāṅgha*. These bands are relieved either with scroll-work or creepers or have niches containing figures, including erotic ones, and *kanyās* in various roles, some being in the clutches of monkeys.

In the upper *jāṅgha* are large *pañcha-ratha* pilasters, placed in the same vertical alignment as the larger *khākharā-muṇḍis* of the lower *jāṅgha*. These pilasters have three mouldings at the base and a set of another three at the top, the uppermost resembling a lotus. Between these pilasters are slabs, both broad and thin. The thin ones are relieved mostly with *kanyās* and erotic figures like those on the uprights of the lower *jāṅgha*; but these figures are often slightly larger in size. The broad slabs are particularly remarkable for elaborate compositions. Unfortunately very few of them have survived.

In one, carved on the east face (in line with a portion of the southern *kanika* of the east face of the porch), a person is seen practising archery, while a group of armed men with folded hands face towards the archer; below are depicted two elephants and two horses with grooms and umbrella-bearers.

A second relief on the south face (in line with a portion of the eastern *kanika* of the south face of the porch) depicts a temple in which are enshrined images of Mahishāsuramardinī, Jagannātha and a *liṅga* (largely broken) on a footed pedestal. To the right is seen a royal worshipper, followed by attendants, handing over a garland to the priest. Below are two elephants, each with an elephant-driver, and an armed man with a shield. There are two more similar but larger sculptures of chlorite (one in the local Museum and the other removed to the National Museum, New Delhi), which most probably were in the exterior niches (p. 67) of the sanctuary. These reliefs indicate not only the extension of the royal homage to deities of the Vaishṇava, Śākta and Śaiva cults but also the existence of goodwill and feeling of toleration that apparently prevailed among the adherents of different cults.

In the third, carved on the west face of the central projection of the south side of the porch, a princely figure, armed with a dagger, is perhaps looking at his reflection in a mirror.

The fourth on the south face (in line with the recess between the *anuratha* and *kanika* of the western flank of the south side of the porch) depicts a man and a woman, the latter with a *dupaṭṭā* (scarf) on her head, standing below a tree (pl. VII C). Above it is the representation of a *piḍā* structure, and below are carved a riderless horse, a groom, umbrella-bearers and foot-soldiers, two each.

In a fifth relief on the south face (in line with a portion of the western *kanika* of the south side of the porch) a king, seated on an elephant, receives ovation from a group of outlandish men, clad in frilled petticoat-like lower garments. Evidently they have brought for the king surprise presents which include a giraffe, an animal foreign to India. The scene is laid under a flowering tree with peacocks perched on it.

In a sixth relief on the south face (in line with the south-west corner of the porch), a poor soldier with a knapsack, a shield and a sword is seen taking a short rest, possibly after a strenuous journey on foot, under a shady tree along with his wife, the latter carrying her child on the waist and a box on her head.

A seventh depicted on the south face (in line with the junction between the sanctuary and porch) shows a king killing a bear by catching hold of it by legs.

The eighth scene on the north face (in line with a portion of the western *kanika* of the north face of the porch) depicts a royal horseman with a bow in hand and followed by an armed retinue on a hunting mission. The animals, the prey, are circled by the attendants.

In the ninth a homely scene within a palace is carved on the east face (in line with a portion of the northern *kanika* of the east side of the porch). A royal figure, cosily seated on a throne amidst a group within a pillared double-tiered pavilion, is seen fondling a baby. On the sinister side of the pavilion stands an elephant, near which there is a group of persons with folded hands and a groom. Evidently these persons are the *entourage* of the king, waiting for the latter to mount, a presumption partly supported by the lower register, which depicts the necessary paraphernalia of a king about to undertake a journey; thus by the sides of a vacant palanquin (with a bolster) of the type generally used by the royal ladies and a royal carriage are the umbrellas and bearers. Beside them are a riderless caparisoned horse, two foot-soldiers, one equipped with a sword and the other with a bow and arrow, and four pots containing provisions.

In some reliefs an important personage is seen seated either on a *chaukī* (footed seat) or on the ground within a pillared pavilion, evidently delivering a discourse to an assemblage of men, either standing or seated. Many of the latter are princes, or noblemen as they came on horses, elephants or *dolā*, these along with some persons, presumably attendants, being depicted below the pavilion. Some of these attendants hold umbrellas.

The *varaṇḍa* consists of two mouldings separated by a recess. The last has on it a honeycomb pattern with insets, relieved with *yakshas* in the attitude of supporting superstructure at intervals. The lower moulding, of which only fragments are now extant at places, are in two planes. The upper, thinner and more projected, contains a row of flowers (generally a diamond-shaped flower alternating with a four-petalled flower). The lower, with friezes within beaded

borders, depicts generally the pursuits of the warrior-class: (i) military march consisting of elephants carrying warriors (rarely a camel is seen in the group of elephants carrying armed soldiers) armed with shields, foot-soldiers usually with shields and swords, and cavalry; (ii) homage to the king by the vanquished consisting of infantry, cavalry and elephant, the last two dismounted and with folded hands before the king, the latter seated within a royal roofed carriage; (iii) submission of the defeated king (threatened by the conqueror with a brandishing sword), his *entourage* with vacant palanquin, riderless horses and rows of umbrellas waiting in a line; (iv) a duel, both men armed with a sword and a shield (one oblong and the other round); (v) subduing infuriated war-elephant with long spears; (vi) actual fight between foot-soldiers; (vii) processions of elephants with an elephant-driver; and (viii) a special procession of men carrying an empty palanquin and princely carriage, umbrella-bearers, provision-carriers and banner-holders, evidently going for the king.

The top moulding over the recess is also in two planes. The upper, more projected, contains a series of lotus-petals with a row of geese or floral motif (four-petalled flowers alternating with diamond-shaped flowers) on a projected fillet below. The lower depicts friezes like marching of army, row of elephants, provision-carriers and assemblage before a king with a beaded border below. A few fragments of this moulding have survived in dislocated condition.

The wheels

As already noted (p. 38), the wheels (pl. VI) are carved against the face of the berm. Treated magnificently, each wheel consists of an axle kept in position by a pin as in a bullock-cart, a hub, a felly

and sixteen spokes, of which eight are broad and the other eight thin. The hub is decorated with beaded rings and a row of lotus-petals, the latter in a few wheels having dancers and musicians very rhythmically composed, and the felly with elaborate scroll-work (within beaded borders) containing within many of the foils birds and beasts in various actions. The spokes project beyond the felly. The thin ones have a row of alternate beads and discs. The broad spokes again broaden near the centre where they assume roughly the shape of a diamond. The remaining portion of the spokes are minutely carved with scroll-work, floral motifs, creepers, beaded strings and stylized *chaitya*-windows. In the central part of the diamonds is a medallion. These medallions contain variously deities (e.g. Īśāna, Īśānī, Sūrya, Vishṇu and his incarnations), erotic and amorous figures, *kanyās* in various poses, a nobleman with a man standing with folded hands, a princely cavalier, a man playing on cymbals, a cavalier hunting a boar, a man having a sword with a second man standing in front of him, elephant-riders, a cavalier attacking an animal with a long spear, shooting an arrow towards a pair of deer or a lion or brandishing his sword towards a man and a seated person approached by others with folded hands. Similar medallions also occur on the face of the axle. The available ones contain a god in the company of a goddess (Śiva-Pārvatī?), Gaja-Lakshmī, Kṛishṇa playing on a flute amidst an assemblage of *gopas* (cowherds), *gopīs* and cows, Narasiṁha, a king on an elephant with a group of persons in front seeking mercy and a cavalier with a sword.

The porch (jagamohana)

Built on a low *pishṭa*, the *bāḍa* of the porch (pl. VIII) is *pañcha-ratha* on plan and has five horizontal

divisions—*pābhāga*, lower *jāṅgha*, *bāndhanā*, upper *jāṅgha* and *varaṇḍa*. In the conspicuously projected *rāhā*, on the front, north and south sides, are provided doors and steps communicating the doors with the berm. The western *rāhā* provides internally a passage leading to the door of the sanctum.

PISHṬA.—It consists of two mouldings—*khurā* and a combination of inverted *khurā* and *khurā*—with a honeycombed recess in between. The scroll-work, with animals, flowers and leaves woven into its foils, within beaded borders on the *muhānṭi* of the *khurā*, the lowest moulding, is capped at intervals by projected insets relieved with motifs like *chaitya*-windows and animals. In the sloping part of the *khurā* are ornate lotus-petals, each alternating with a beaded pendant. The central band of the upper moulding is carved luxuriantly with leaves and the upper sloping part with ornate petals and pendants. Receding from the upper moulding is a vertical strip, carved, as in the topmost part of the *varaṇḍa* of the berm, with ornate petals, each alternating with a pendant.

PĀBHĀGA OF THE KANIKA AND ANURATHA OF THE BĀḌA.—The *pābhāga* of these *rathas* has a set of five mouldings—*khurā*, *kumbha*, *paṭā*, *kaṇi* and *basanta*—on either side of an elaborate *khākharā-muṇḍi*, the latter itself arranged in between four pilasters. The *muhānṭi* of the *khurā*, the bottom moulding, is lavishly carved with three horizontal bands within beaded borders; while the central band, the broadest, has foliated leaves, the top and bottom ones present creepers often with various motifs within the foils. The remaining portion of this moulding is relieved with ornate lotus-petals and pendants and has at intervals a *chaitya*-window, also ornate, immediately above the *muhānṭi*. Crowning the *khurā* is a second tiny *khurā*

with a honeycomb pattern at the *muhāṇṭi* and lotus-petals and beaded strings on the body. A minutely carved string encircles the plain *kumbha*, which has as its neck a *khurā*-shaped member with creepers on the *muhāṇṭi*. Animals are interwoven among the foils of the creeper that relieves the *paṭā*. The *kaṇi* is austerely plain, while the *basanta* is richly treated with foliated leaves within beaded borders.

As already noted, the *khākharā-muṇḍis*[1] are elaborately composed. *Pañcha-ratha* on plan, they have a set of four mouldings in the *pābhāga*, a carved *jāṅgha* with a central niche and a *varaṇḍa* in the form of a *noli* relieved with two rows of lotus-petals with a beaded line in between. In the niches are compositions such as: (i) a seated king, with a small sword in hand, fronted by two figures, one with a manuscript and the other with a knapsack; (ii) a royal cavalier, shooting an arrow at two animals, in the company of a foot-soldier with a shield and sword; (iii) a princely warrior seated on the shoulder of a giant in the company of foot-soldiers armed with shields and swords and umbrella-bearers; and (iv) a seated teacher delivering discourse to two persons. The *gaṇḍi* of the *khākharā-muṇḍis* consists of a succession of seven *khurā*-shaped mouldings crowned by a *srāhi*, while the *mastaka* is a *khurā*-shaped *pañcha-ratha khākharā* with a *ghaṭa* flanked by a lion on either side as the crowning elements. The *khākharā* has lotus-petals and *chaitya*-window motif on the body and creepers with beaded borders on the *muhāṇṭi*.

The two inner pilasters, which immediately flank the *khākharā-muṇḍi*, have at the base a set of three mouldings crowned by two lions rampant on a single or double elephants, in the middle a round column

[1] An almost complete one is preserved on the northern flank of the west face.

entwined by *nāgas* and *nāgīs*, and at the top a *vajra-muṇḍi*. The outer pilasters, *pañcha-ratha* on plan, have a base of three mouldings, a faceted shaft relieved with scroll-work, creepers, floral motifs and beaded strings and at the top the upper portion of a *khākharā-muṇḍi*, the latter crowned by a *ghaṭa* with a lion or lion-on-elephant on either side.

LOWER JĀṄGHA OF THE KANIKA AND THE ANURATHA OF THE BĀḌA.—Both the *kanika* and the *anuratha* of the lower *jāṅgha* contain a *khākharā-muṇḍi* with two pilasters each on either side. These *khākharā-muṇḍis* have above two base-mouldings a framed niche, over which is a *chhajjā*-like projection capped by a moulding, a *srāhi* and a *khurā*-shaped *khākharā*. In the niches were detachable sculptures, eight of which presumably were *dikpālas*,[1] the guardians of eight quarters. Most of these sculptures, which were of chlorite like the ones in the *muṇḍis* (p. 66) of the sanctuary, were evidently removed in the first half of the nineteenth century when there was a greedy hunt for carved chlorite pieces (p. 12) from the standing porch.[2] Among the eleven antiquities donated by P. C. Mukherjee to the Indian Museum in 1893, there is an inscribed chlorite sculpture, which, to judge from its dimensions (77·5 cm. high and 42·5 cm. wide), was in one of the *muṇḍis* either of the porch or of the upper *jāṅgha* of the sanctuary. It depicts within a pillared pavilion a seated figure looking like a *pāṇḍā* (proprietary priest) talking to a group of nine persons, presumably the *sevakas* or officials in the service of the Sun temple.

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[1] They are Indra (east), Agni (south-east), Yama (south), Nirṛiti (south-west), Varuṇa (west), Vāyu (north-west), Kubera (north) and Īśāna (north-east).

[2] Many of the chlorite sculptures of the sanctuary are preserved, thanks to the shroud of débris that concealed them from sight.

One of the group has by his side a locked box, a second appears to hold writing material, while three are shown in the pose of counting. At the extreme bottom is an inscription giving the names of three persons —Valīki Nāyaka in charge of expenditure (or keeping of account) and stores (*vaya-bhaṇḍāra-adhikāri*), Alālū Nāyaka, the chief of stores, and Aṅgāi Nāyaka in charge of store (*koshṭha-karaṇa*).[1] It is likely that these temple-dignitaries are portrayed in the sculpture. In this connexion it may be recalled that among the *sevakas* of the deity of the Liṅgarāja temple of Bhubaneswar there are still two families who hold the office of *koshṭha-karaṇa*.

The two inner pilasters, with two mouldings at the base and a *vajra-muṇḍi* at the top, have their shafts divided into two by a set of three mouldings; in both the divisions are erotic or amorous figures. With five mouldings at the base, the outer pilasters have richly carved *pañcha-ratha* shafts with a central moulding. Their lotus-shaped capital, with two mouldings below, support a *pañcha-ratha* abacus, the central facet of the latter having the relief of either a *chaitya*-window or a *yaksha* in the attitude of supporting the superstructure.

In the recesses between the *rathas* are large rampant *virālas*, boldly sculptured; those carved as lions and shown rampant on elephants occupy the recess between the *kanika* and the *anuratha*, while the others, which are fashioned as hybrid creatures with leonine bodies and the head of either an elephant (often with a grim-looking warrior held aloft in its trunk) or a demonish figure and shown as rampant on an armed fierce-looking demonish figure, embellish the recesses between the *rāhā* and the *anuratha*.

[1] *Journal of the Asiatic Society*, III (1961), pp. 61 and 62.

BĀNDHANĀ.—The *bāndhanā* is composed of five mouldings—*varaṇi*, *noli*, *paṭā*, *noli* and *basanta*—all connected at intervals by vertical bands, decorated with creepers. The first, third and fifth mouldings bear scroll-work and creepers. While the lower *noli* is carved with lotus-petals and a central beaded band, the upper presents curved beaded bands and creepers.

UPPER JĀṄGHA OF THE KANIKA AND ANURATHA.—The layout of the upper *jāṅgha* is similar to that of the lower, but here *piḍā-muṇḍis* have taken the place of the *khākharā-muṇḍis* and almost life-size erotic figures (pl. IX) have replaced the *virālas*. Among the erotic figures feature some black sheep among ascetics; they could not give up their lust despite their having taken to the hermit's robe (pl. IX B). The niches of the *piḍā-muṇḍis* are all vacant. Eight of them probably held the *śaktis* (female counterparts) of the *dikpālas*. On either side of the *āmalaka* of the *piḍā-muṇḍi* is a *yaksha* in the attitude of supporting superstructure.

VARAṆḌA.—It is made of ten mouldings: (i) *khurā*-shaped *varaṇi* with a creeper at the *muhāṇṭi* and lotus-petals on the body; (ii) *pheṇi* resembling up-turned petals; (iii) *noli* relieved with foliated leaves; (iv) *khurā* with a row of geese at the *muhāṇṭi*; (v) *paṭā* with a frieze of animals within a beaded border; (vi) *noli* with foliated leaves or lotus-petals and a central beaded line; (vii) and (viii) *paṭās* with friezes of animals within beaded borders; (ix) *noli* either with lotus-petals and a central beaded band or with foliated leaves; and (x) *basanta* carved with elephants with or without riders, foot-soldiers, etc.

RĀHĀ.—The side faces of the *rāhā* maintain the fivefold divisions of the other parts of the *bāḍa*. In the *pābhāga* are two elaborate *khākharā-muṇḍis*, the outer

one carved against a raised background with reliefs of creepers, beaded lines and foliated leaves, and a *tri-ratha* pilaster between the usual *pābhāga*-mouldings. The face of the pilaster is treated with beaded lines and scrolls, the central one elaborate with foliated leaves between the scrolls and having animals and beaded lines within the foils. In the recess of the lower *jāṅgha*, in one alignment with the inner *khākharā-muṇḍi* of the *pābhāgā*, is a *virāla* (carrying a rider) trampling on a prostrate elephant (also with a rider), while above the outer *khākharā-muṇḍi* of the *pābhāga* is a second *khākharā-muṇḍi* with a niche. The corresponding places of the upper *jāṅgha*, above the *bāndhanā*-mouldings, have erotic or amorous couples (pl. X) and a *vajra-muṇḍi* with a niche, now empty. The mouldings of the *varaṇḍa* do not run beyond the recess containing the erotic or amorous couples, and we have in this place a succession of *chhajjā*, honeycombed recess, *paṭā*-like projection with an elephant-frieze and two pilasters in continuation of the front face above the architrave. The outer pilaster is relieved with a lion (with a rider) rampant on an elephant, while the inner pilaster, *tri-ratha* on plan, has a set of three mouldings below and above, the shaft being carved with creepers, foliated leaves and beaded lines. Above these pilasters is the continuation of the last moulding of the *varaṇḍa*, relieved with elephants.

The veneer-stones of the front face of the *rāhās*, into the thickness of which is provided the passage leading to the chlorite door-frame, have disappeared, except in a small section at the base and at the top on the north side. These three façades were conceived in the form of a *toraṇa* with a multifoil arch springing from two impressive pilasters, one each at either side of the passsage. The pilasters had at the base a set of five mouldings, of which the bottom *khurā* and

kumbha, smaller in height than the first and second mouldings of the *pābhāga* of the main body, are partially preserved. Over the fluted shaft of each pilaster was a set of mouldings (possibly numbering ten) capped by a capital consisting of a succession of *khurā* and two inverted *khurās* relieved with petals. The top of the last was most probably in one horizontal level with that of the architrave which projects forward from the top of the lintel of the door-frame. From the capitals of the two pilasters of each face rose a lavishly-carved multifoil arch (p. 58), which rested against corbels.

Supported by iron beams, the architraves were of chlorite and had their front faces sculptured. Despite its chequered career, the eastern one, originally a monolith, is still at Konarak. The whereabouts of the other two are unknown. The front half[1] (6·146 m. long, 1·143 m. high and 53 cm. thick) of the eastern architrave, which was sliced into two (p. 16), is now in a shed erected outside the enclosure at its north-east corner. It is relieved with nine *grahas* (pls. XII and XIII), each under the multifoil arch of a tiered pavilion. The *graha* on the extreme dexter is Sūrya (Sun), richly bejewelled and seated cross-legged, with the stalk of a lotus in each hand. Next are Chandra (Moon), Maṅgala (Mars), Budha (Mercury), pot-bellied bearded Bṛihaspati (Jupiter), Śukra (Venus) and Śani (Saturn), all seated cross-legged on a lotus, carrying in the left hand a water-pot and in the right a rosary. The fierce-looking Rāhu (ascending node), with the upper half alone depicted, bears in both hands a crescent each, while Ketu (descending node) holds a bowl of flames in the left hand and a sword or staff in the right. The pacification of the planets (*graha-śānti*) is prescribed in Hindu astrology to ward off evil. Above the architect is a projecting *chhajjā*-like member,

[1] The maximum thickness of the rear slice is 96·5 cm.

tri-ratha on plan, which is preserved alone on the north side. Its façade is embellished with a frieze of elephants within a beaded border. Separated from this member by a honeycombed recess, there is a *tri-ratha* moulding relieved with elephants. Above this, in the central part, is the carved frame of an oblong niche, the latter having originally a seated image of Sūrya.[1] On either side of this niche are two pilasters decorated with creepers, scroll-work, beaded lines and floral motifs. Beyond them and partially covering the two outer pilasters are plain stone courses, their inner sides corbelled. These rise above the *chhajjā*-like member and end below the lowest *piḍā* (p. 61) of the *gaṇḍi*. Against these courses and also the plain ends of the *chhajjā* rested the missing multifoil arch (p. 57), which acted as an arched frame for the image of the niche and the pilasters. On the outer sides of these corbelled courses are again pilasters crowned by a band relieved with elephants. The four inner pilasters (two each on either side) are relieved with scroll-work and creepers, while the two outermost are distinguished by a *virāla* (ridden by an armed warrior) rampant on an elephant.

DOOR-FRAME.—Of the door-frames, the eastern one (pl. XI) is the best preserved; but for a small missing section near the base, it is also complete. The partially-preserved northern one is still in position. The southern door, now blocked up, is completely stripped of its frame, but a portion of its lintel was found near the eastern staircase. Made of chlorite, these luxuriantly carved frames are almost alike both in composition and execution. The following description of the eastern one, thus, applies to the others as well.

[1] That the image represented Sūrya is clear in the drawing of the eastern door-frame, accompanying Stirling's account of Orissa.

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PLATE I

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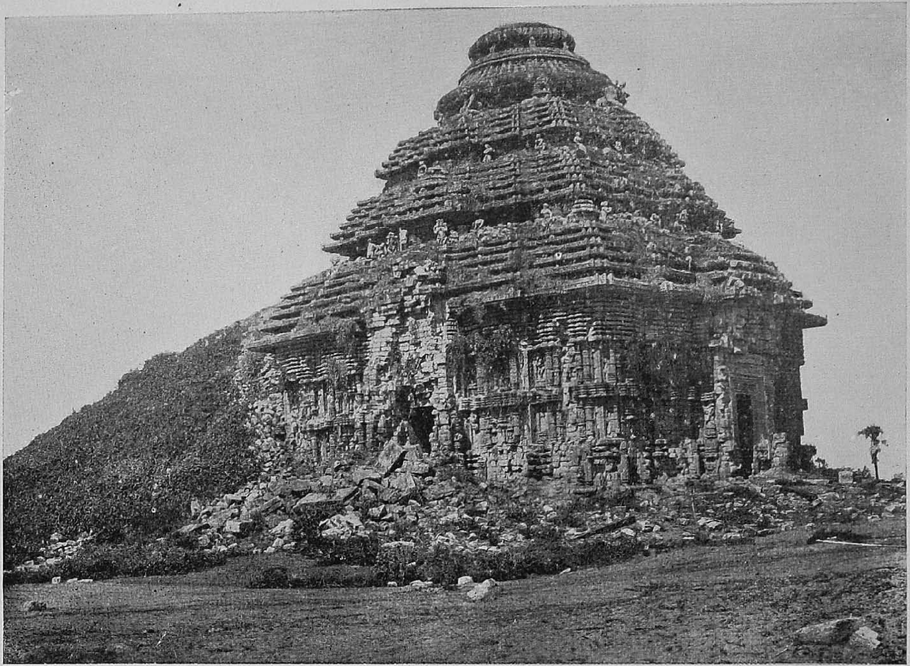
Temple 1 : porch, strip of sanctuary and lion-on-elephant, as illustrated by J. Fergusson. See p. 11

PLATE II



Temple 1 : porch and wreck of sanctuary before repair. *See p. 12*

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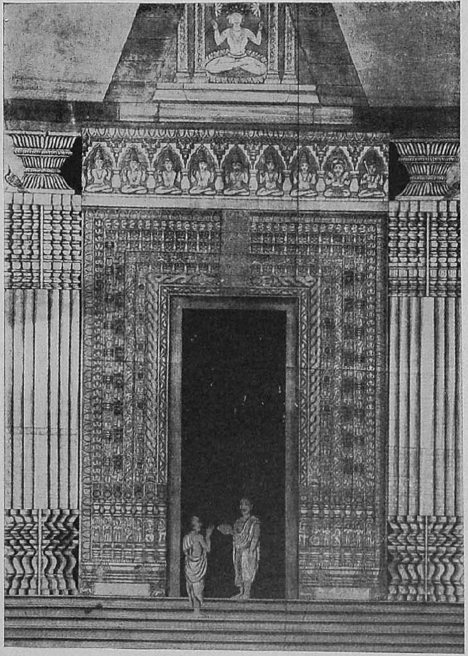
PLATE III



A. *Temple 1 : eastern rāhā of porch and door-frame, as illustrated by A. Stirling.* *See p. 13*

B. *Temple 1 : lion-on-elephant, as illustrated by C. Mackenzie.* *See p. 79*

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PLATE IV

Temple 1, porch and ruined sanctuary : general view. See p. 38

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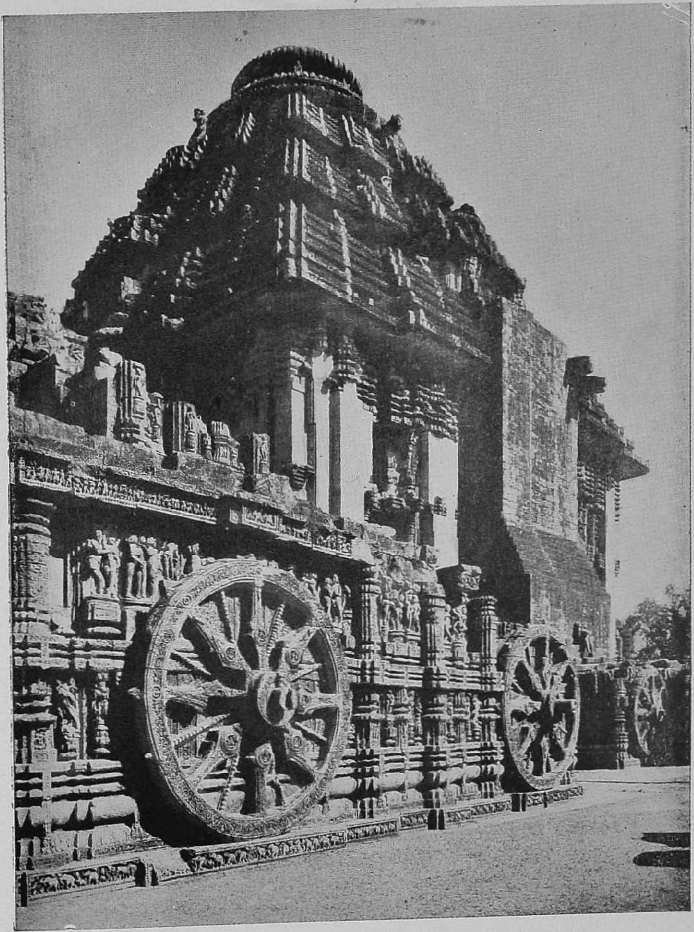
PLATE V



Temple 1 : porch and portion of sanctuary. See p. 38

PLATE VI

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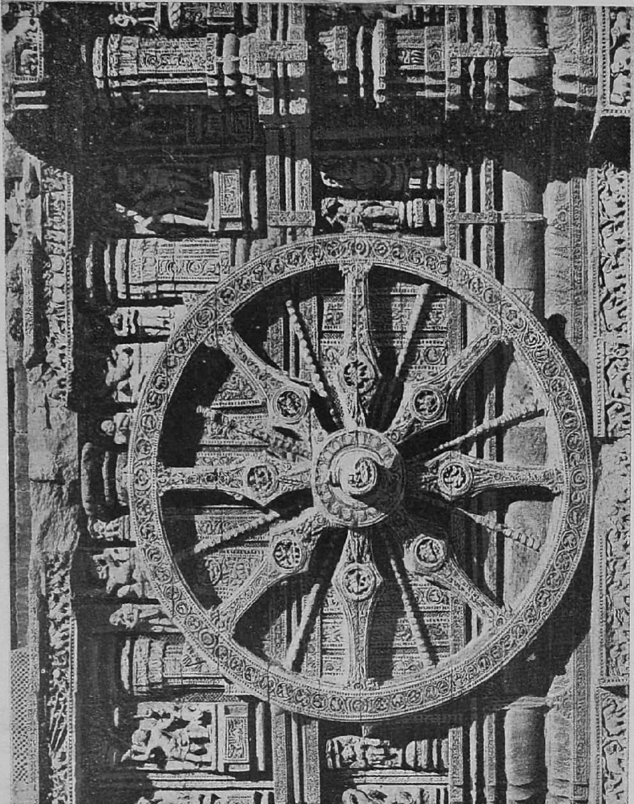

Temple 1, portion of berm: decorative details. See p. 42

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A

B

C

Temple 1, berm : A, *touching leave-taking;* B, *pious naga;* C, *dignified couple. See pp. 43, 44 and 47*

PLATE VIII

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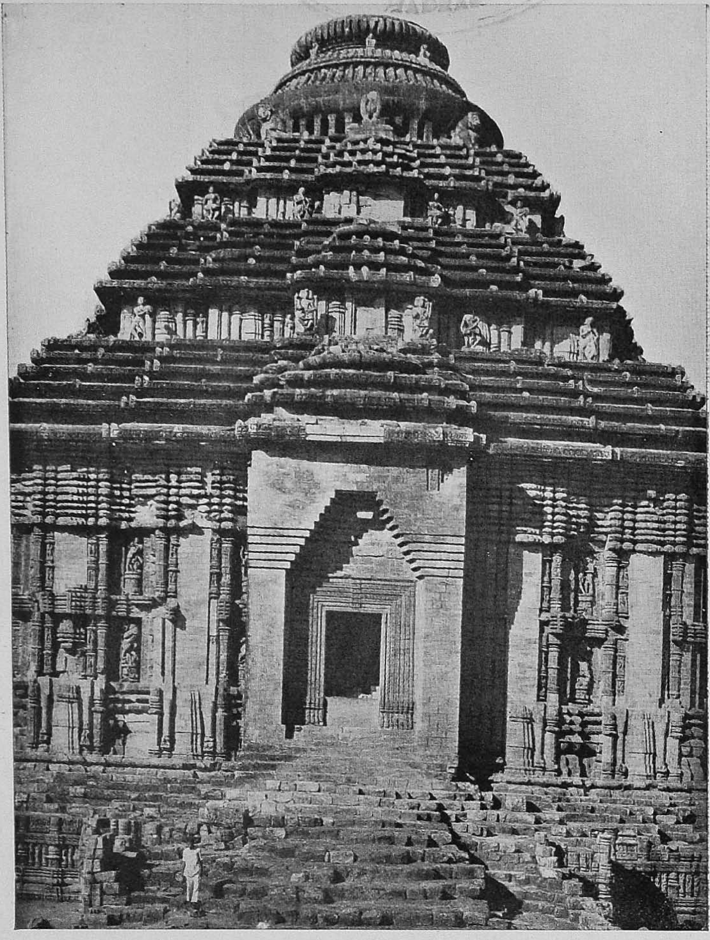

Temple 1, porch ; front side. See p. 50

PLATE IX

A. *Temple 1, porch : amour.* *See p. 55*

B. *Temple 1, porch : lascivious sadhu. See p. 55*

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PLATE X

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Temple 1, porch : amorous couple. *See p. 56*

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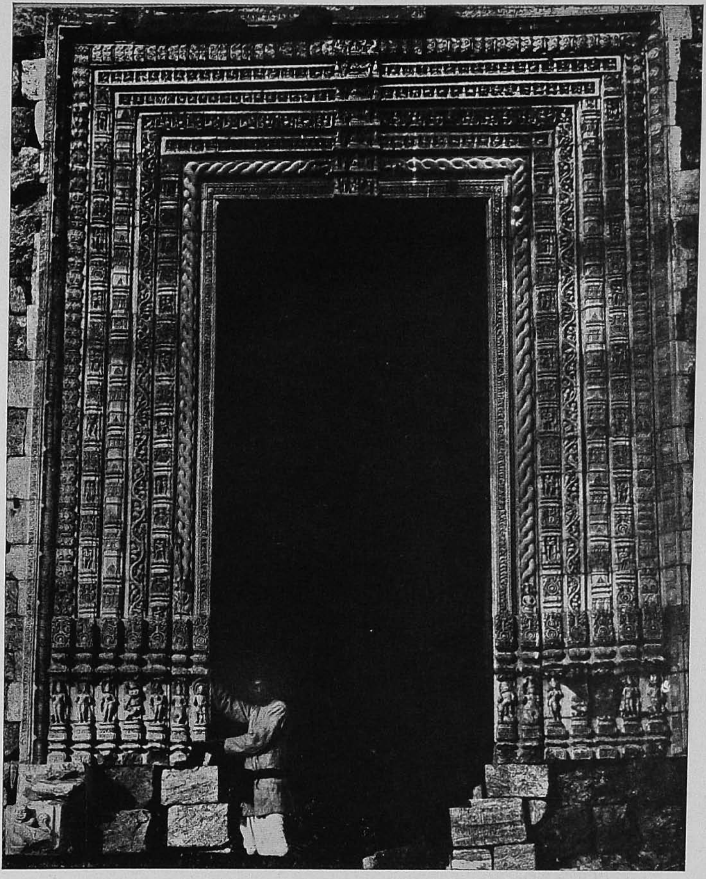
PLATE XI



Temple 1, porch : eastern door-frame. *See p. 58*

PLATE XII

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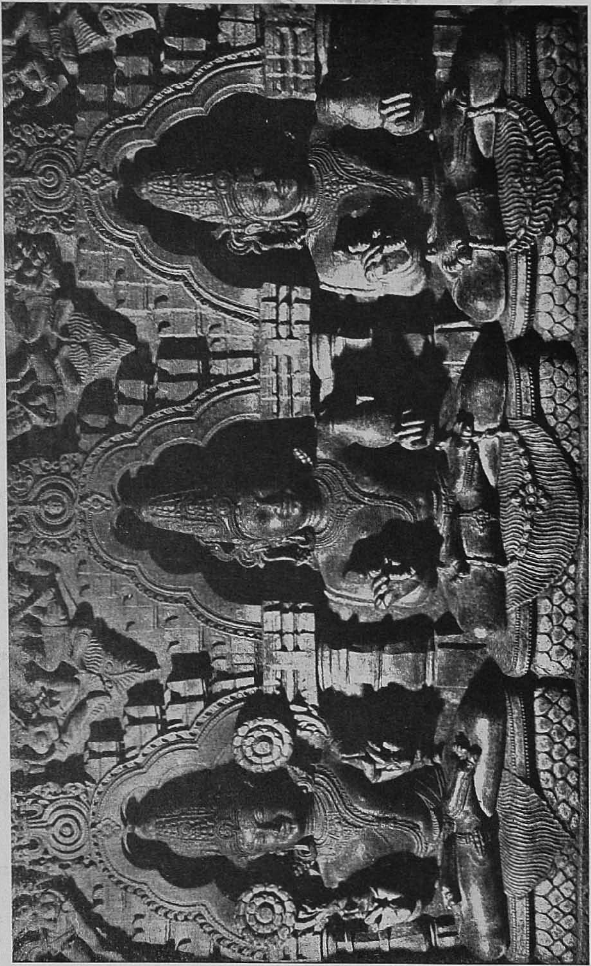

Temple 1, porch, nava-graha architrave : Ravi, Soma and Maṅgala. See p. 57

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A

B

Temple 1, porch, nava-graha architrave ; A, *Budha, Bṛihaspati and Śukra;* B, *Śani, Rāhu and Ketu.* *See p. 57*

PLATE XIV

A. *Temple 1, porch : Bhairava. See p. 63*

B. *Temple 1, sanctuary : King Narasiṁha practising archery. See p. 67*

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PLATE XV

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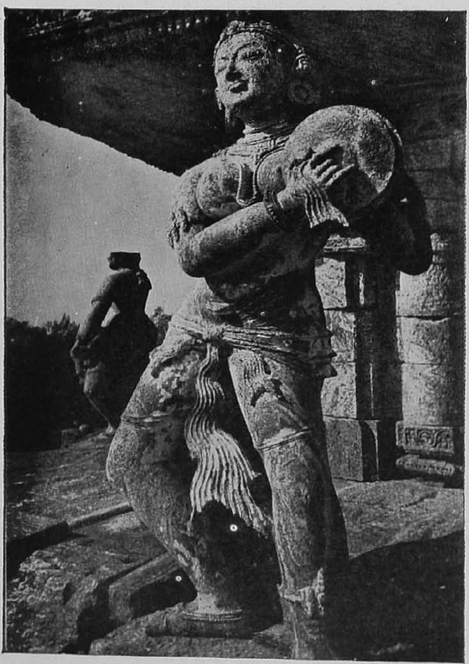

A. *Temple 1, bottom terrace of porch : danseuse playing on large cymbals.* *See p. 63*

B. *Temple 1, middle terrace of porch : danseuse playing on small cymbals.* *See p. 63*

A. *Temple 1, bottom terrace of porch : danseuse blowing a long pipe.* *See p. 63*

B. *Temple 1, middle terrace of porch : drummer.* *See p. 63*

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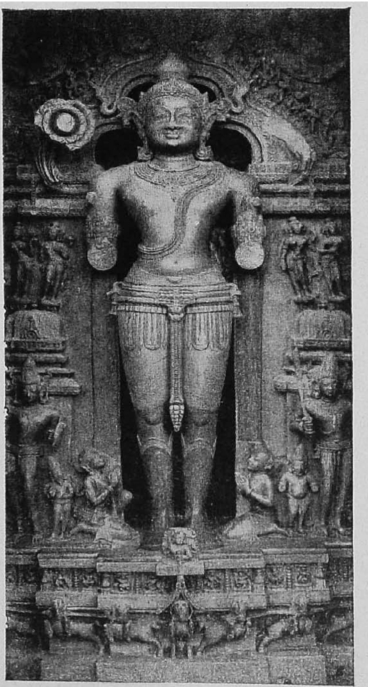
PLATE XVII



A. *Temple 1, sanctuary : southern pārśva-devatā.* *See p. 69*

B. *Temple 2 : Sūrya (National Museum).* *See p. 93*

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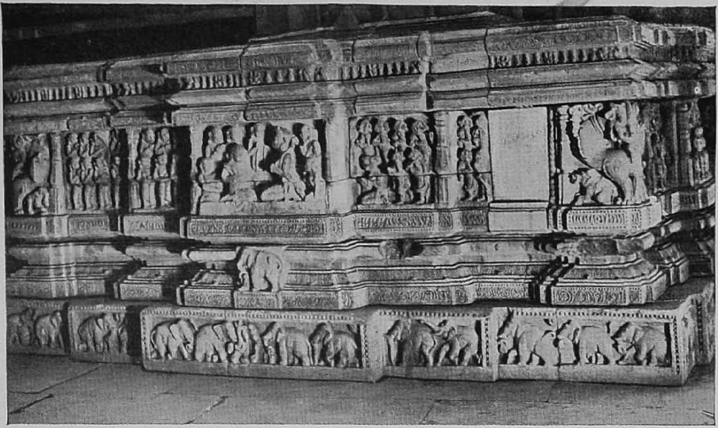
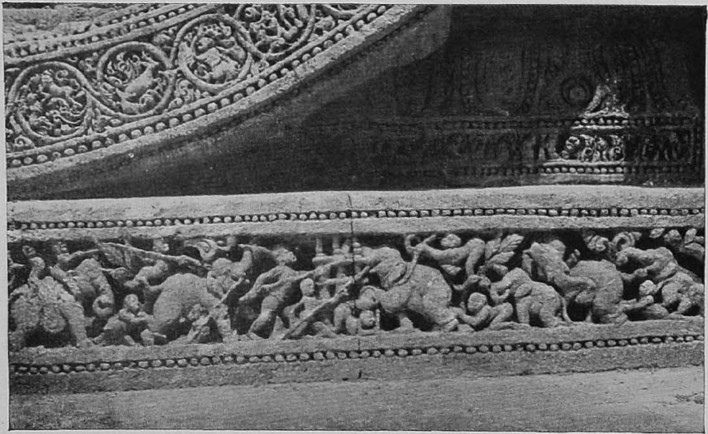
PLATE XVIII



A. *Temple 1, platform of sanctum sanctorum : royal visit on the occasion of consecration.* *See p. 74*



B. *Temple 1, upāna : a vital moment in the trapping of elephants.* *See p. 39*

PLATE XIX

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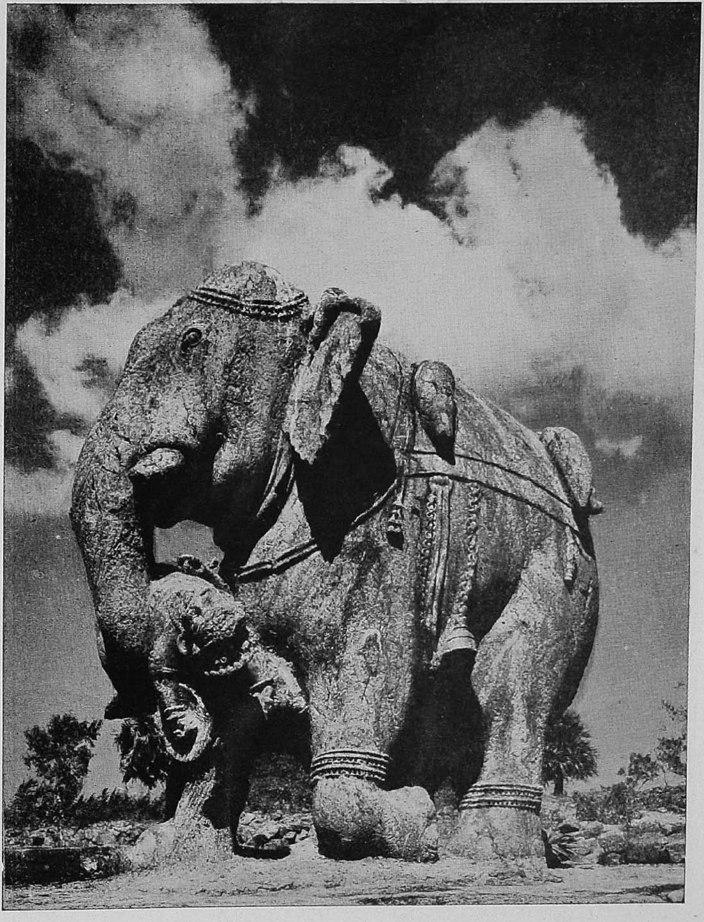

Temple 1 : enraged elephant. See p. 79

PLATE XX

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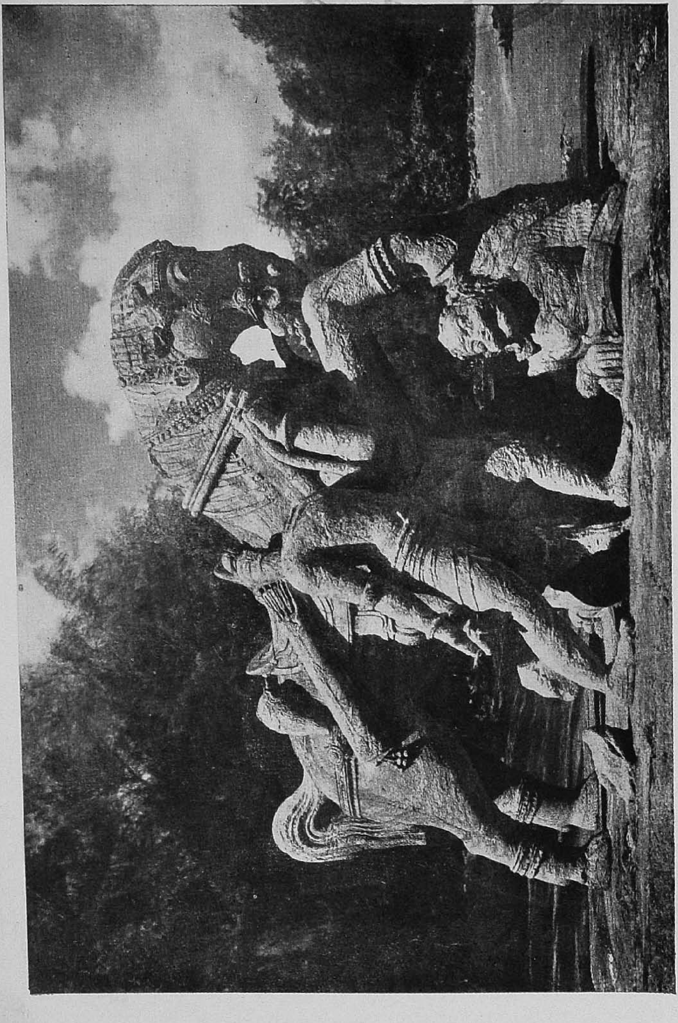

Temple 1 : war-stallion. See p. 80

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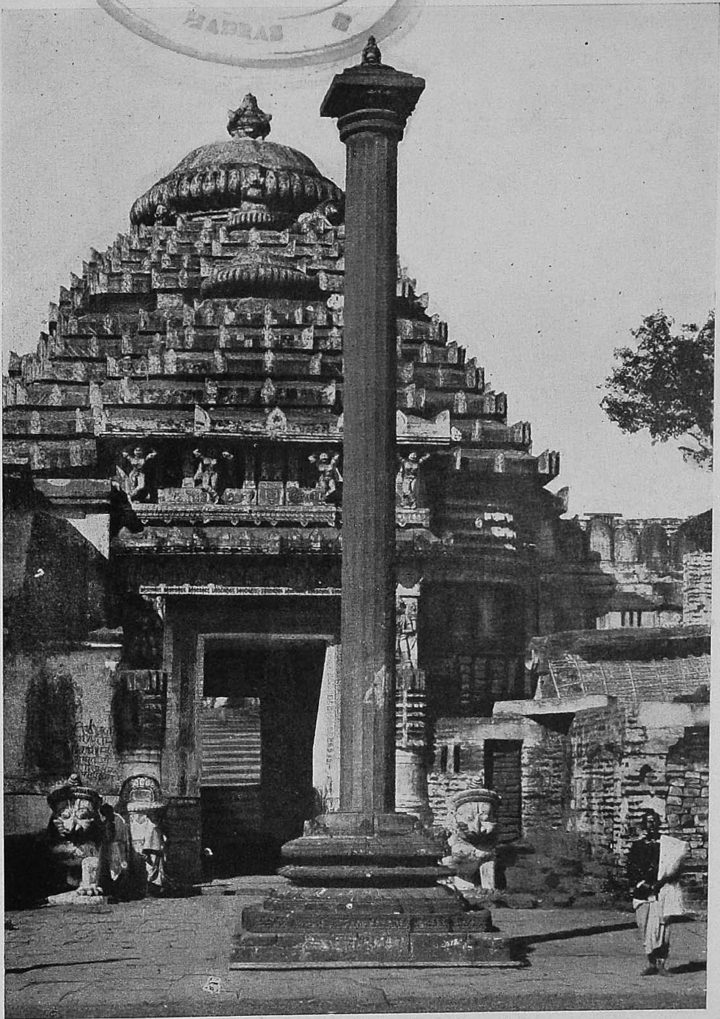

Aruṇa-stambha (now in front of the *Jagannātha* temple, Puri).
See p. 80

PLATE XXII

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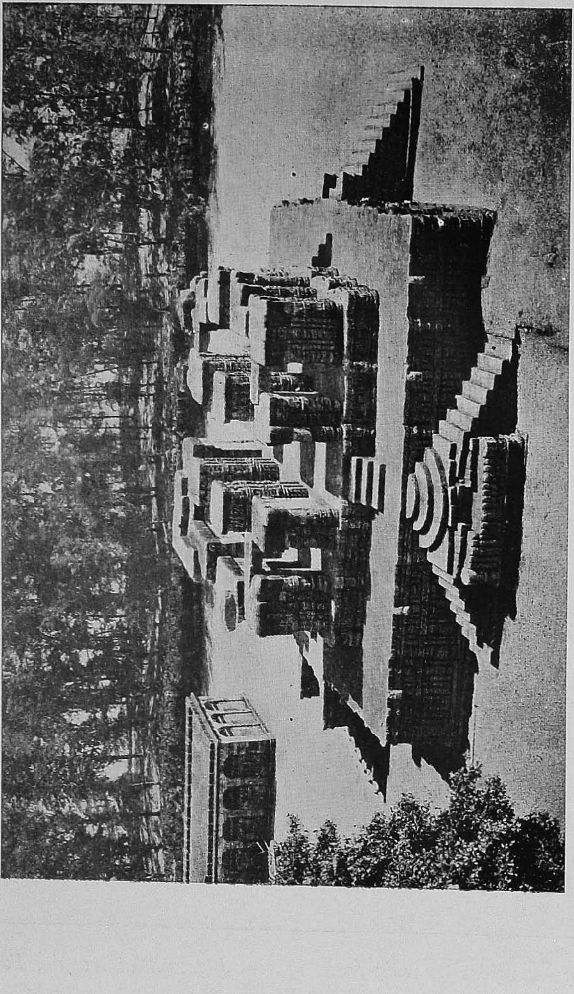

Temple 1, bhoga-maṇḍapa : general view. *See p. 81*

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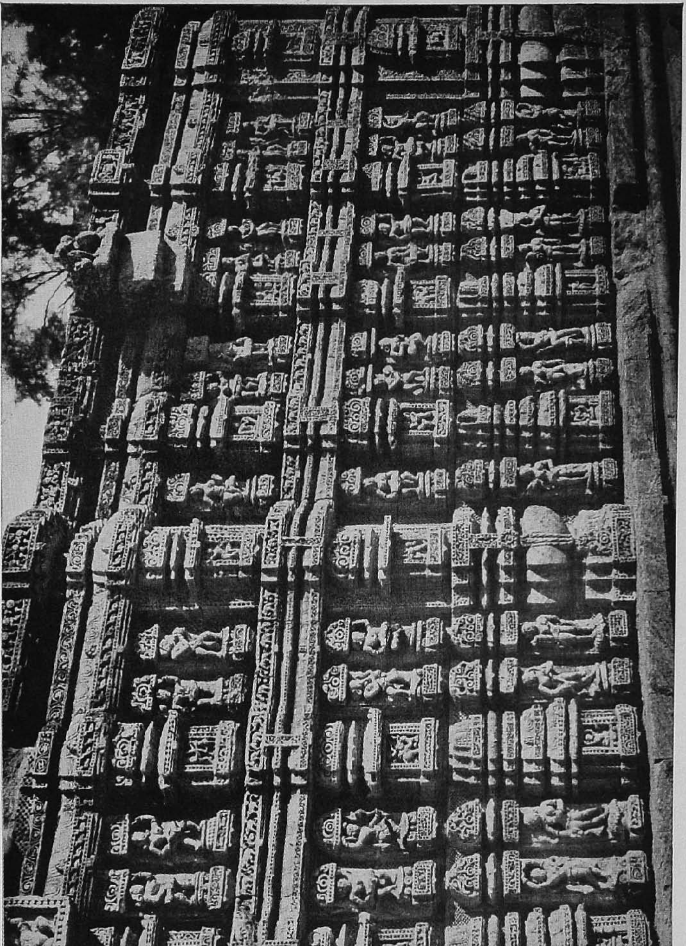
PLATE XXIII



Temple 1, berm of bhoga-mandapa : opulence of decoration and carnival of life. *See p. 82*

PLATE XXIV

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Temple 1, ceiling-stone of bhoga-maṇḍapa : pageant of dance and music in honour of the Great Splendour. *See p. 86*

Each jamb is divided into eight facets, all on different planes, the innermost being the most receding and the outermost the most projected. At the base of the seven facets beginning with the innermost are figures, all standing under a tree below a roof with a *vajra-muṇḍi*—a demonish figure on the innermost, a standing *nāga* with a *ghaṭa* in the left hand on the second, a graceful female on the third, two *kinnaras* (half human and half animal), one above the other, the upper one playing on cymbals and the lower one on a flute on the fourth, a female on the fifth, a male on the sixth and a man with two cows on the seventh. Below the lotus-stand is a set of three carved mouldings. The remaining portions of these facets bear the following reliefs: (i) foliated leaves within a beaded border (first or innermost facet); (ii) the double coil of a hooded *nāga* couple (second); (iii) a vertical succession of miniature pavilions with *vajra-muṇḍis* containing figures, all erotic or amorous except one (a *yaksha* in the attitude of supporting the superstructure) on the southern jamb (third); (iv) a motif, known in Oriya as *gelabāi*, *ḍālimāṅkuḍī* or *manushya-kautukī*, in which frolicking boys are shown on a meandering creeper (fourth); (v) a vertical series of dwarf pilasters embellished with mouldings, ornate medallions and beaded tassels issuing from the mouths of *kīrti-mukhas* (fifth); (vi) a succession of pavilions with erotic or amorous figures as on the third (sixth); and (vii) *sapuriā*, a motif containing fruits like pineapples amidst clusters of palm-like leaves (seventh). Of the *nāga* couple on the second facet, the human bust of the *nāga* with a bowl of offerings is carved above the base, but that of the *nāgī* is shown by the side of the central inset of the lintel. In the eighth facet is a succession of lotus-petals besides a creeper with a beaded inner border at the extreme end.

The motif of the eighth facet and those on the upper parts of the first, second and seventh facets run on the corresponding facets of the lintel as well. On the third facet of the lintel are seated divine female musicians, each within a compartment made by pilasters. The fourth contains a row of flying *vidyādhara* couples (one perched on the thigh of the other) with socked legs, carrying variously floral offerings, musical instruments, *ghaṭas*, incense-burners, *chāmaras*, garlands, a conch, a lamp, etc. In the fifth are dancers and musicians separated by pilasters, while the sixth contains seated musicians within compartments made by pilasters. The motifs on the facets, except the topmost, stop at the central part of the lintel which is slightly projected and divided into a vertical succession of niches. In the lowest niche is the lustration of Lakshmī flanked by a *chāmara*-bearer on either side. With her right hand in *varada-mudrā* (boon-conferring pose of the hand) and the stalk of a lotus in the left hand, the goddess of plenty is being bathed by a pair of elephants, each on a lotus. The next five niches contain each a bearded preacher-like figure with matted hair, seated cross-legged with hands in *mudrās*. These ascetics are attended by two disciples. The seventh depicts a seated bearded figure in meditation inside a *toraṇa*, the latter flanked by the head of a *makara* on either side. The lintel is supported by two heavy iron beams of oblong section.

The door-sill is now missing. It is not known if its façade simulated a moon-stone flanked on either side by a semi-circle as in the case of the sill of the sanctum (p. 77). In continuation of the sill is a set of two chlorite mouldings, which project forward from the base of the jambs. A fragment of this may still be seen near the southern extremity of the south jamb. Divided into *pagas*, both the mouldings—the lower

noli and the upper band-like *basanta*—are relieved with foliated leaves, but of a different design, the upper moulding having further a beaded border. To presume from the door-frame of the sanctum sanctorum, the drawing (pl. III A) of Stirling and an early photograph (pl. XI) of the door-frame, there was a projected slab coming forward from the bottom of the *noli*. The façade of this slab, which was possibly of chlorite, was relieved with a recumbent lion at either end. The design of the central part as seen in the drawing of Stirling differs from the corresponding part of the slab belonging to the door-frame of the sanctum. The latter projects forward in the form of a *pañcha-ratha*—the *rāhā* relieved with a pot-bellied dwarf in the attitude of supporting superstructure, the *anurathas* with foliated leaves and the *kanikas* with creepers.

GAṆḌI.—The *gaṇḍi*, approaching the shape of a stepped pyramid, truncated near the top, is in three gradually receding tiers (*poṭalas*); each tier separated from the other by a prominently-recessed vertical wall, known as *kāṇṭhi*. In the bottom and the middle tiers there are six gradually receding *piḍās* and in the top five, each *piḍā* spaced from the other by a narrow recess. The *piḍās*, with a subdued cyma reversa curve on the upper part, have at intervals tiny vertical projections (called *ṭāṅkus*) in the form of either a semicircle or the quadrant of a circle. The plain surface of the *piḍās* and recesses were originally covered with a plaster of lime and sand. These tiers also maintain the five *ratha*-divisions, the *rāhās* in each tier having, in the upper half, an assemblage of a *beki*, *śrī* or *ghaṇṭā* (supported by a lion), *amlā* and *khapuri*—the lower components of the *mastaka* of a *piḍā deul*. The total number of *ghaṇṭās* is thus thirteen including the crowning one.

The vertical faces of the bottom and second tiers present minutely-carved friezes depicting processions, in which elephants and the army—infantry, cavalry and elephants—along with men, beast of burden and carts carrying military supplies, form the most conspicuous themes. The recessed part below the vertical *muhāṇṭi* of the *piḍās* of the lower two *poṭalas* has a row of pendants, while in the *ṭāṅkus* is a variety of motifs including figures, human, animal and mythological.

The *kāṇṭhis*[1] above the first and second tiers are relieved with *khākharā-muṇḍis, kanyās* and pilasters, the recesses between them having honeycomb pattern. Some of the pilasters, are entwined by graceful *nāgas* or *nāgīs*, others capped by the upper part of the *khākharā-muṇḍis* and still others crowned by the upturned lotus-petals. In the bottom *kāṇṭhi* there are sixteen *kanyās*, each fashioned near the junction of the *rathas*. Gracefully poised, some with sandals, over a flower and below a tree, they are variously engaged in adjusting their ornaments, fondling a child, touching a tree, wringing wet hair and allowing a pet bird to drink the drops of water falling from her hair, carrying a bunch of fruit, playing on a *vīṇā* and displaying her fully-bloomed figure, sometimes with the arms raised and joined over head in an alluring posture. These figures, by their very actions and suggestive flexions, express the sentiments that animate them. Above the decorative architectural motifs and the *kanyās* is a running frieze, the theme of which is a procession of elephants in the forest, very rarely disturbed by a man or a lion.

The terrace over the bottom and the middle tiers is occupied by large (some life-sized and others somewhat over life-size) figures, sculptured in the round—

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[1] The *rāhā* of the *kāṇṭhi* above the bottom tier had originally a niche, which contained an image, pilasters and *khākharā-muṇḍis*.

a scheme unique in conception in Orissan temples. Above the *rāhā* of the bottom tier, at either end, is a six-armed four-headed life-sized Bhairava (pl. XIV A) with an awe-inspiring facial expression, open mouth with teeth displayed, a garland of chopped heads and flaming hair. Dancing in ecstasy on a boat, he carries in his left hands a mace, a *khaṭvāṅga* tipped with a skull and a kettle-drum and in the right a skull-cup, a trident and a wheel.

In contrast with these grim-looking figures are the slightly more than life-sized female musicians (pls. XV and XVI), in the prime of their exuberant youth, playing with full confidence and delight. On the terraces above the bottom and the middle tiers each are sixteen such figures, one each above the *anuratha* and the *kanika*. These boldly-carved vivacious but dignified celestial choristers with their pliable plasticity and dynamic sweep create an unforgettable phantasy in stone. The instruments of this orchestra are various. Thus, there are not less than three kinds of drums, carved exquisitely: (i) barrel-shaped double-faced longish *ḍholak*, (ii) *pākhoāj* with graphically delineated leather-braces and wooden blocks for producing the desired intonation and (iii) longish cylindrical drum played by sticks (pl. XVI B). Besides the drums and small cymbals (pl. XV B), there are long pipes (*shahnāī* or *nāgasvaram*, pl. XVI A), deafening *karatālas* (large metallic cymbals fastened with strings, pl. XV A) and melodious *vīṇās*. Except the player on *vīṇā*, who stands with a graceful poise and serenity of expression, fully absorbed in the rhythm of music, all are animated under the spell of melodious music which turns their physical movements into enchanting dances in harmony with the musical measures. The rhythmic actions of the limbs and the delicately-tilted heads of some of these graceful beauties are unsurpassed.

Traces of the original brick-red colour are yet visible on some figures. Over this colour there is a pinkish lime-plaster, evidently added at a later date.

MASTAKA.—The *mastaka* consists of a *beki* with two projected bands, a bell-shaped member (*śrī* or *ghaṇṭā*), a second *beki* with two projected bands, *amlā* and *khapuri*, the crowning *kalaśa* being missing. The *śrī* is divided into two parts by a central band, each part relieved with a row of long petals. It is supported by eight lions, of which four facing the intermediate directions have two hinder parts. Eight figures seated on their haunches and with their hands resting on the ground, support the *amlā* on their backs.

INTERIOR.—The interior of the porch, now inaccessible (p.19), is reported to have been plain but plastered. A simple moulding is said to have run all round the walls at a height of about 1·52 m. Over the ceilings of the passages leading into the floor are corbelled recesses. These ceilings are supported by three iron beams. 'The room, which was a square 60′ (18·288 m.) × 60′ (18·288 m.)', says Bishan Swarup, 'was divided into a nave and two aisles by means of four pillars, which supported a ceiling on solid iron beams. In what way this ceiling was supported is not known, as the whole thing fell down in 1848, and nothing of it was left when the porch was filled up in 1904.'[1] According to Fergusson, however, 'the roof is formed after the usual bracket fashion of the Hindus, each course projecting beyond the other so as to give the appearance of inverted stairs; the angles of each, however, are here rounded off which considerably improves the effect. At about half the height,

[1] Bishan Swarup, *op. cit.*, p. 23.

where its dimensions narrow to about twenty feet (6·096 m.), a false roof has been thrown across, the remains of which now lie heaped up as they fell on the floor of the apartment: among them may still be remarked several beams of wrought iron, about twenty-one feet in length and eight inches' section, and a great many blocks of stone, fifteen and sixteen feet long (and they were probably broken in their fall), and of a section of six feet by two or three. When in situ it is by no means improbable that they extended the whole length across.'[1]

The sanctuary (*deul*)

The entire *gaṇḍi* along with the upper part of the *bāḍa* of the sanctuary caved in long ago. Yet, one can visualize the form of the sanctuary, when entire, from the extant fallen fragments and the contemporary but shorter temples of Yameśvara and Ananta-Vāsudeva of Bhubaneswar. As in the porch, its *bāḍa*, which is *pañcha-ratha* on plan, had fivefold vertical divisions, of which the *varaṇḍa* has completely disappeared.

PISHṬA.—Consisting of two mouldings, it is similar to that of the porch (p. 51). The decoration on the upper moulding of the side faces of the *rāhās* alone is different. These particular faces are distinguished by the friezes of animals portrayed in a masterly way. Particularly remarkable are the life-like boar and the herd of deer on the east face of the south *rāhā*.

PĀBHĀGA.—The *pābhāga* consists of five mouldings, *khurā*, *kumbha*,[2] *paṭā*, *kaṇi* and *basanta*, similar to those of the *pābhāga* of the porch, though on a much

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[1] Fergusson, *op. cit.*, p. 28.

[2] The plain surface of the *kumbha* preserves large patches of plaster painted on the top in chocolate-red.

larger scale. Unlike those of the porch, these mouldings are continuous, undisturbed by the intrusion of pilasters and *khākharā-muṇḍis*. This arrangement has imparted to the sanctuary a solid dignified appearance. The surface-treatment of the mouldings is also analogous except that the central facets of the *khurās* have pillared pavilions capped by *vajra-muṇḍis*. The themes of the niches inside the pavilions, with a single exception where a preacher-like figure is seen seated in meditation, centre round the life of a king in the palace, in court or in the field. Thus, in one an armed king is seen fondly looking at his reflection in a mirror; in another he is generously distributing largess to the supplicants; in a third he is discoursing before an assemblage; in a fourth he is attentively going through a manuscript or charter amidst an assemblage; in a fifth he is proceeding, fully armed, on foot with umbrella-bearers; in a sixth he is depicted as a horseman; and in a seventh, curiously enough, he looks like brushing his teeth in the presence of his attendants.

The front faces of the *rāhās* are covered partly by the double stair leading to the *pārśva-devatās* (pp. 69-71) provided in the lower *jāṅgha* and partly by the cells (p. 72) below the porches in front of the *pārśva-devatās*.

LOWER JĀṄGHA.—Both the *kanika* and the *anuratha* of the lower *jāṅgha* have each a *khākharā-muṇḍi*, on either side of the latter of which are two facets relieved with scroll-work and creepers. In the niches of the *khākharā-muṇḍis* were chlorite sculptures, none of them now *in situ*. Eight of these were *dikpālas* placed in the quarters over which they preside in the *kanika*. Three of them—Agni, Yama and Nirṛiti—are now in the Museum, while the fourth, Īśāna, has been removed to the National Museum, New Delhi. An idea about

the subject of the sculptures, which embellished the niches of the *anurathas* and also some of the niches of the *piḍā-muṇḍis* of the *anurathas* of the upper *jāṅgha*, may be had from the chlorite sculptures that were found in 1906-07 in course of the clearance of débris around the sanctuary. The themes of these sculptures are : (i) one (Bhaga or Vivasvat) of the Ādityas; (ii) worship of Jagannātha, Mahishāsuramardinī and *liṅga* (two sculptures); (iii) a marriage-scene;[1] (iv) King Narasiṁha in the company of priestly figures (three sculptures); (v) King Narasiṁha on a swing; (vi) King Narasiṁha practising archery (pl. XIV B); and (vii) a teacher discoursing to his pupils. Four of these sculptures—depicting an archery-scene, the king on a swing, the king with priests and worship of three deities—are now in the National Museum.

As in the porch, lions-on-elephants occupy the recesses between the *kanika* and the *anuratha*, while the corresponding places between the *anuratha* and the *rāhā* have composite animals, with the head either of a demon or of an elephant and the body of a lion, rampant on an armed demonish figure.

BĀNDHANĀ.—A shred of the *bāndhanā* is preserved near the south-eastern corner. Unlike that of the porch, it consisted of three mouldings—*khurā* with a creeper at the *muhāṇṭi* and lotus-petals on the body, *noli* with a foliated pattern and *khurā*-shaped *basanta* with lotus-petals.

[1] The existence of monkeys on the plinth just below the wedding-scene may indicate that the marriage of Rāma and Sītā is depicted here. At the same time, it may be recalled that the name of the queen of Narasiṁha was Sītā, so that here may be a veiled reference to the wedding of Narasiṁha himself. The sculpture, to presume from its size, which is larger than that of others of this group, embellished a niche other than that of the *anuratha*.

UPPER JĀṄGHA.—Only a fragment of the upper *jāṅgha* is preserved on the southern flank of the eastern side. Here a large *kanyā*, wringing water from her hair, is seen standing in the recess between the *anuratha* and the *kanika* in one plumb with the lion-on-elephant of the lower *jāṅgha*. All the recesses between the *rathas*, no doubt, contained such large *kanyās* in various roles. Three of these *kanyās*, one playing on a *vīṇā* and the second on cymbals (?), are now in the Museum. A fourth lies on the floor of Structure 2 (p.103). The upper part of a fifth is now in the National Museum.

Though there are no other facing stones, except a few by the side of the *kanyā*, *in situ*, it may be presumed on the analogy of the other contemporary Orissan *deuls* that there were *piḍā-muṇḍis* on the *kanika* and the *anuratha* of the upper *jāṅgha*. The niches of these contained chlorite sculptures. Eight of the latter, which were in the *kanika*, must have been the female counterparts (*śaktis*) of the *dikpālas*, seated in their proper directions. All these *śaktis* have disappeared except Vāruṇī, now displayed in the National Museum.

VARAṆḌA.—Over the upper *jāṅgha* was the *varaṇḍa*, which most probably had a set of ten mouldings.

GAṆḌI.—The curvilinear *gaṇḍi*, to presume from the contemporary specimens, had five richly-carved *pagas* on each of the four faces, the *kanika* having *bhūmi-amlās*, which marked the *bhūmis*, and *anuratha* a succession of miniature *rekhas*. From each *rāhā* projected the figure of a lion, of which the eastern one rampant on an elephant, the largest of the four, now lies on the ground, a few metres to the north-east of the sanctuary. This colossal lion-on-elephant (5·69 m. high), which is now in three pieces, was originally made of two blocks. The animals of the south and west sides (the western one reduced to fragments)

also rest in the courtyard respectively near the south side and the north-western corner of the sanctuary.

MASTAKA.—Over the *gaṇḍi* were the crowning elements consisting of a *beki*, *amlā*, *khapuri*, *kalaśa* and the finial, the last in the semblance of a lotus. The *amlā* was supported by large figures, of which four, perched on the tops of the *rāhās*, represented four-armed figures seated cross-legged. Two fragments of two such figures, have been assembled into one and kept near the north-eastern corner of the platform of the sanctuary. The lower hands of this figure rest on the lap in meditative pose, while the upper left and possibly the upper right carry the stalk of a lotus. One of these figures, a nearly complete one, is displayed in the Indian Museum, Calcutta. It represents one of the Ādityas (Bhaga or Vivasvat) with lotuses in upper hands and a trident in the lower right.

PĀRŚVA-DEVATĀS.—The three *rāhās* of the lower *jāṅgha* contain the images of *pārśva-devatās*. The frames, which housed the latter, have long disappeared. The walls and roof around them are thus all modern. Made of chlorite, all the *pārśva-devatās*, representing Sūrya, are rather stiff in conformity with the canonical convention regarding hieratic deities. But these sculptures, with their benign and majestic bearing, are superb specimens of the iconographic art. The minute details of the ornaments and decorated drapery are rendered with consummate skill. The sculptures are further noted for their elaborate composition, crowded with accessory figures.

The more than life-sized image of Sūrya (pl. XVII A) in the southern niche stands majestically on a *sapta-ratha* chariot drawn by seven horses—Aruṇa, the charioteer, busy with the lash and rein, being shown down to the waist. The principal figure, with a face

beaming with compassion, is in the round. Draped in a short *dhotī* and with feet covered by long boots, the sole remnant of the *udīchya-veśa* (northern dress prescribed for Sūrya), the figure is decked in a girdle, a *ratnopavīta*, a necklace with five beaded strings held by a central clasp, two kinds of short *hāras*, a neck-ornament, armlets, ear-rings and a short crown, all richly embellished. Both the hands carry the stalks of fully blossomed lotuses, the characteristic attributes of Sūrya. The arrangement of the coiffure in the form of a small *stūpi*-shaped bun on the crown of the head is rather curious. Around the head is a carved four-foil halo with tongues of flames at the outer edge. At the crown of the halo is a *kīrti-mukha* flanked on either side by a flying figure blowing a conch, while around the edges are ten divine dancers, including two *kinnaras*, all playing on musical instruments. At the extreme top corners is a *vidyādhara* couple. Above the two *pañcha-ratha* pedestals, on the inner ends of which rests the halo, are two four-armed deities, the dexter one representing the four-headed (three visible) beared pot-bellied Brahmā with matted hair, carrying a *kamaṇḍalu* (spouted water-pot with a handle), *tridaṇḍa* (three-forked stick), *sruk* (sacrificial ladle) and rosary. The figure (Vishṇu?) on the sinister pedestal carries in the right hands a mace and a lotus, the attributes in the left broken. Below these two figures are four standing females, two each on either side of Sūrya, carrying variantly a *chāmara*, offering on a dish-on-stand and a lotus. Possibly they represent the four wives of Sūrya, viz. Rājñī, Nikshubhā, Chhāyā and Suvarchasā. Near the right foot of Sūrya is the royal donor with folded hands, his sword kept flat on the *ratha*. The kneeling figure near the left foot wears a *tilaka* (sacred mark) on the forehead and evidently represents the family-priest of the king. The bearded Daṇḍī and

bearded and pot-bellied Piṅgala, the two attendants of Sūrya, stand respectively beyond the king and the priest. Beyond both Daṇḍī and Piṅgala is a *khākharā-muṇḍi*, each containing a warrior, armed with a shield and sword, while at the extreme ends are two females, Ushā and Pratyushā, dispelling darkness by shooting arrows. The chariot has in its uppermost facet dancers, most of them playing on musical instruments as well. The entire sculpture (3·38 m. high, 1·80 m. wide and 71 cm. thick), made of a single piece, is installed on a chlorite *pañcha-ratha* pedestal, the latter relieved with three richly-carved mouldings, namely, *khurā*, *noli* and *basanta*.

The sculpture (3·45 m. high, 1·78 m. wide and 76 cm. thick) in the western niche is similar in all essential details to the one in the southern, except that here Sūrya wears a *tilaka* on the forehead and a richly-embellished high crown. Further, the dancers on the chariot are all women.

The arrangement of subsidiary figures in the sculpture (3·58 m. high and 1·73 m. wide) of the northern niche is roughly the same as in the other two sculptures, but here the king, with a sword and *chāmara* in hands, and the priest are both standing, looking towards the lord of the sky, as the latter is spanning the horizon on a spirited horse. Lavishly bejewelled, Bhāskara[1] here also wears a high crown and a *tilaka*.

PORCHES IN FRONT OF THE PĀRŚVA-DEVATĀS.—All the *pārśva-devatās* are honoured with a porch in front of each. There was a narrow strip of landing between the niche containing the *pārśva-devatā* and the porch. The latter has disappeared in all cases, leaving barely the floor, which now stretches as a terrace

[1] *Athav=āśva-samārūḍhaḥ kārya ekas=tu Bhāskaraḥ* (*Agni-Purāṇa*, ch. 51).

in front of the deity. On the analogy of the contemporary Ananta-Vāsudeva temple of Bhubaneswar, it may be presumed that these porches were full-fledged *piḍā deuls*, with central openings on all sides. They, unlike those of the Liṅgarāja temple of Bhubaneswar, were integral parts of one unified scheme.

Below the floor of these porches and the niches of the *pārśva-devatās* was accommodated a complex of two oblong cells, of which those on the south and west sides were designed as a subsidiary sanctum and a front porch. The walls of the porch of the west side and the outer cell of the north side are now extinct.

The south complex, erected over the main berm, is the best preserved of the three. The body of the entire complex rests on a *pishṭa*, similar in design to that of the main porch. It is *pañcha-ratha* on plan on three sides, the three *rāhās* providing the door-openings of the porch. It has the usual five vertical divisions. As in the berm, its *pābhāga* consists of five mouldings—carved *khurā*, plain *kumbha*, decorated *paṭā*, plain *kaṇi* and carved *basanta*, all connected by carved bands. In the lower *jāṅgha* are *khākharā-muṇḍis* and pilasters with either a *kanyā* or erotic figures, the recesses having lions-on-elephants. The niches of the *khākharā-muṇḍis* variously contain erotic figures, hunting scenes and a king looking at an object. In the *bāndhanā* are three mouldings similar to those of the berm. Over the upper *jāṅgha*, roughly analogous to the lower, is the *varaṇḍa*, of which a projected moulding in two planes is extant at places. The lower, which is recessed, is decorated with a frieze of elephants and the upper with flowers and creepers. The facing stones above this are missing.

The inner cell served as the sanctum. Against its back wall is a *khākharā-muṇḍi*, crowned by a *ghaṭa*, the latter with a lion-on-elephant on either side. The

niche (68·5 cm. high, 33·5 cm. wide and 19 cm. deep) for the deity is now empty. The frame around the niche is carved with a creeper, the central piece on the lintel being the lustration of Lakshmī. The ceiling is spanned by corbels, the latter, some in the form of inverted *khurās*, projecting inward from the longer side walls. The faceted frame around the door, which communicates the sanctum with the porch, is relieved with creepers and scrolls besides the lustration of Lakshmī in the centre of the lintel and a door-keeper leaning on his staff at the bases of the jambs. Over the lintel is a projected architrave bearing *nava-grahas* and two *yakshas*, the latter at the ends. This architrave is supported by two pilasters carved with scrolls, often with animals within, and is shaded by a *chhajjā*, the vertical face of the latter embellished with a creeper.

The porch has three passages leading to the doors, facing cardinal directions. Its ceiling, now missing, was spanned by corbels. The door-frames are relieved with scroll-work and foliated leaves.

The extant portion of the western complex is similar to the southern. Gaja-Lakshmī, however, is wanting on the lintel of the niche (63·5 cm. high, 35·5 cm. wide and 14 cm. deep) of the *khākharā-muṇḍi* against the back wall of the sanctum.

The inner room of the northern complex was not used as a sanctum, as the drain, coming from the sanctum sanctorum of the sanctuary, pierces its back wall and passes through its floor and also that of the outer room. The layout of the exterior face of the inner room is similar to that of the southern and western sanctums. In the extant niches of the *khākharā-muṇḍis* of the lower *jāṅgha* occur a king amidst his followers, Kṛishṇa lifting Govardhana hill, a king hunting a boar and a cavalier in the company of an armed foot-soldier.

SANCTUM SANCTORUM.—A modern flight of steps, edging the northern face of the niche containing the western *pārśva-devatā*, now leads to the top of the extant western wall of the sanctum sanctorum. A second flight, also a modern provision, at the north-western corner of this wall, descends down to the floor of the sanctum (10 m. square), the approach to which was originally through the porch. The walls of the sanctum are of ashlar-masonry, austerely plain except for a set of three uncarved mouldings at a height, varying from 1·40 m. to 1·83 m. above the floor. The latter, paved with chlorite slabs, slopes towards the middle portion of the northern wall, in which there is a channel to drain off the washings. Patches of plaster, which originally covered the walls, still linger at places.

Located in the middle of the western side of the room, the lavishly-carved chlorite platform (pl. XVIII A), which sustained the pedestal of the presiding deity, is one of the most magnificent of its kind. Built on a low *upāna*, which is *pañcha-ratha* on three sides and is relieved with a freize of elephants, it has three divisions. The lowest division, *pañcha-ratha* in front, is composed of three carved mouldings—*khurā*, *noli* and and *basanta*. In the central part of the *khurā* and *noli* of the *rāhā* is an oblong inset depicting an elephant-driver tenderly feeding a royal elephant. The latter possibly represents the one which brought the king (depicted above) to the temple on the occasion of its ceremonial consecration.

The recessed middle division, which has a lion-on-elephant at either extremity, is divided into pavilions by pilasters. The lowest moulding of the upper division serves as the roof of these compartmented pavilions. Inside the central pavilion is a kneeling moustached king, evidently the donor of the temple,

with folded hands and with a sword, his inseparable royal insignia, held in his arm-pit, in the company of seven priests, of which the chief is seated immediately in front of him. One of the standing priests is seen garlanding him, while another, seated behind him, carries a manuscript or a charter. All the faces are lit with contentment and delight. The sinister *anuratha* compartment contains in a rhythmic composition the kneeling queen among six of her attendants, the latter standing and carrying variously fly-whisks (*chāmaras*), a bowl, a knapsack and the like. The compartment to its sinister and also all the compartments on the north face team with female followers of the queen, some with folded hands and others holding objects like *chāmara, ghaṭa* (water-pot), bowl of offerings, knapsack, *vīṇā*, small cymbals and the pet bird. The remaining compartments on the dexter flank of the east face and all the compartments of the south face bear the male retinue of the king, some with folded hands, others with long swords, some again with bowls of offerings and still others with manuscripts. Their dresses display considerable variety.

The upper division consists of three mouldings—*khurā*-shaped *varaṇi* with a creeper at the *muhāṇṭi*, a plain *kaṇi* and *basanta*, the last relieved with lotus-petals and creepers. In the recess between the *kaṇi* and the *basanta* are pilasters, *yakshas* and lions. The lotus-petals of the topmost moulding of the central projection of the front face are effaced to a considerable extent due to the touch of the devotees when the temple was in use. On the top of the platform near the eastern edge are round depressions, evidently caused by the friction of pots for considerable periods of time.

Against the south face of the platform is a flight of steps for access to the top. On this platform

rests a monolithic chlorite pedestal. It has a projected *khurā*-shaped moulding at the base. On the top is a concave chase for draining out the ritualistic water into a channel, which projects from its north face.

The pedestal was found empty even at the time of the clearance of the débris fallen inside the sanctum. The image had been removed, according to the *Mādalā-pāñji* noted above (p. 9), to the precincts of the temple of Jagannātha. In the Viriñchi temple within the enclosure of that complex is in worship a small image of Sūrya (called Viriñchi) claimed by the priests as hailing from Konarak. Hidden behind this image is a chlorite sculpture, 1·83 m. high and 91·5 cm. wide; its lower portion, together with the front part of the feet of the central figure, is covered by the former. The back portion of the main figure is cut out but roughly finished. Draped in a plain *dhotī*, held by a girdle of five strings, of which the central one has a middle band of diamonds and the rest are cable-shaped, and decked in a *ratnopavīta* of three beaded strings and oblique beaded pendants, a necklace of similar pattern but with six beaded strings held by a central clasp, a small beaded *hāra*, ornate armlets, a long garland of *champaka* flowers, *kuṇḍalas* and a richly-embellished high *mukuṭa* with a *stūpi*-shaped member at the crown, the deity seems to have been seated cross-legged. Both the forearms with attributes, if any, are broken. Around the head is a trefoil arch with tongues of flames at the outer edge. In its top centre is a *kīrti-mukha*, while at the top is an umbrella. This arch springs from two *makaras*, each perched on a pedestal of three mouldings. Above the *makaras* are celestial females. On the dexter side there are four standing figures in two vertical rows; the smallest of them carries a *chāmara*, while the

figure by its side possibly plays on a drum. The attributes in the hands of the upper figures are broken. On the sinister side are three figures, the attributes in their hands, too, missing. On either side of the main figure is a female *chāmara*-bearer. At the slightly rounded top corners of the oblong back slab is a *vidyādhara* couple, with a garland in hand and flying through clouds.

Though the workmanship and the facial expression of the central figure recall those of the *pārśva-devatās* of the Konarak temple, the identity of the image cannot be established in the absence of attributes. The image may perhaps be identified if the front portion below the feet, where the mount of the deity is depicted, is exposed.

The chase of the spouted pedestal, on which it is now placed, being larger in length than the width of the image, it is doubtful if the pedestal belonged to the sculpture.

PASSAGE.—To come back to the Konarak temple, the floor of the passage leading to the sanctum is paved with chlorite slabs. The flat ceiling is made of long slabs of stones, the latter supported by three iron beams. Over the ceiling is a chamber. The missing ceiling of the latter rested above corbels, which project inwards from the north and south walls. In the back wall of this upper chamber are rough narrow steps. Evidently, they were intended to give access, through an opening made into the ceiling, to the chamber over the *garbha-muda* (bottom ceiling) of the sanctum.

DOOR-FRAME.—The lavishly-carved chlorite door-frame of the passage is similar to the eastern one (p. 58) of the porch. The front face of the sill was in the form of three semi-circles, the central one, the

largest, robbed by chiselling. The façades of these semi-circles were richly carved. The face of the extant sinister semi-circle has two male figures dancing with a dagger in hand between two bands, the latter with a central beaded line. The sloping portion over the upper border is relieved with lotus-petals. The top surface also bore carvings including the outline of a conch. These carvings are largely defaced by the footsteps of the devotees.

In horizontal line with the sill is a set of two *pañcha-ratha* mouldings, which project forward from the base of the jambs. Made of chlorite, both the mouldings—the lower one in the shape of a *noli*—are treated with luxuriant leaves, that on the *basanta*, the upper moulding, being inside beaded borders. Both the mouldings are connected by a highly ornate *chaitya*-window motif carved on the central part of the *rāhā*.

Below these mouldings, but projecting forward, is a chlorite member which rested on the floor of the passage that communicates the door of the sanctum with the porch. It has at either end a recumbent lion and at the centre a *pañcha-ratha* projection. The *rāhā* of the latter is relieved with a pot-bellied dwarf in the act of supporting the superstructure, while the *anurathas* and *kanikas* have foliated leaves and creepers respectively. Behind the frame was a wooden door with two leaves, the position of their posts indicated by sockets, two each on the floor and the ceiling of the passage.

The colossi

Each of the three staircases of the porch was originally guarded by a pair of colossi—two lions, each rampant on a crouching elephant, on the east,

two elephants, richly decorated and fully harnessed, on the north and two gorgeously caparisoned war-stallions on the south. Each of these animals—master-pieces of Orissan art—was originally mounted on a partly carved platform (pl. III B). The animals on the north and south sides have been installed on new pedestals, some metres further from their original locations. They now face the porch instead of the enclosure (p. 15). The two compositions of the east side are now in front of the parapets of the eastern flight of the *bhoga-maṇḍapa*. Covered with plaster, all these animals were originally coloured in chocolate-red, patches of which are still extant at places.

LIONS-ON-ELEPHANTS.—One of these was in its position (pl. I) till 1838, when Kittoe sketched it.[1] An earlier drawing (pl. III B) of this lion-on-elephant was from the brush of an artist in the employ of C. Mackenzie.[2] The measurements of the platform (as exposed above ground then) which bore this composition, as given in the caption of the latter drawing, were 3·048 m. (long) and 1·828 m. (wide), the height along with the animals being recorded as 5·791 m. The maximum height from the feet of the elephant to the head of the lion is 2·565 m. In the rolled trunk of the prostrate elephant is a terrible-looking male.

ELEPHANTS.—Rendered with life-like realism, both the elephants are remarkable for the plastic treatment of the bulky volume. The eastern one (pl. XIX), 2·133 m. high, holds aloft in its curled trunk a demonish figure, armed with a shield and a small curved sword, evidently with the intention of hurling it away.

[1] *Jour. Asiatic Soc. Bengal*, VII, pt. II (1838), pl. XXXVIII.

[2] *Ibid.*, New Series, IV (1908), p. 303 and pl.

A similar demonish figure, with rolling eyes, coiled beard, moustache and coiled tresses, is seen below the body of the western elephant, 2·235 m. high.

HORSES.—Pulsating with the very breath of life, both the stallions, richly equipped with trappings, bridles and strings, display the consummate workmanship and dynamic sweep of an assured hand who has succeeded in expressing the exuberant vitality of the animals in all its sensitiveness. The western one (2·045 m. high and 2·921m. long), with a bejewelled person (now headless) holding the bridle by its side, is better preserved (pl.XX). A quiver full of arrows and a scabbard for a sword hang from its back. Two fierce-looking figures armed with a shield and a small curved sword are below the horse, one beneath the latter's body and the other nearly crushed under its hoofs.

Aruṇa-stambha

In front of the eastern flight of the porch was a tall free-standing chlorite pillar, *dhvaja-stambha*, with Aruṇa, the charioteer of Sūrya, at the crown. Of exquisite workmanship and elegant proportion, the Aruṇa-*stambha* was a fitting appendage to the temple. It (pl. XXI) now stands in front of the main gate of the temple of Jagannātha at Puri (p. 10).

The sixteen-sided monolithic shaft of the pillar rises from an artistic base in the form of a full-blown lotus. The latter rests on a *pañcha-ratha* platform which consists of three mouldings—*khurā* with a scroll-work on the *muhāṇṭi* and lotus-petals on the body, *kaṇi* and *basanta*. A frieze of peacocks within beaded borders embellishes the central band of the last, over which is an inconspicuous *khurā* relieved with lotus-petals, the topmost facet having a row of petals arranged like battlements. At the four corners of the platform

is a lion with two hind parts, rampant on an elephant, also with two hind parts. Below the platform is an *upāna*, *pañcha-ratha* on plan. Its vertical face is carved with a row of devotees and elephants, besides military procession consisting of infantry, cavalry, elephants and men and animals carrying supplies.

The crowning piece of the pillar is Aruṇa with folded hands, his left knee in the kneeling posture and right bent and raised, seated on the pericarp of a full-blown lotus. The latter is perched on a plain square slab, this again having below it a second but larger slab. Beneath this is an inverted *khurā*-shaped member, relieved with lotus-petals, rising above a set of two mouldings.

The bhoga-maṇḍapa

In front of the eastern flight of the porch, but beyond the sites of the lions-on-elephants and Aruṇa-*stambha*, is a pillared hall on a high berm (pl. XXII). This detached structure is generally believed to be a *nāṭa-mandira* (festive hall) on account of the carnival of dance and music chiselled over the faces of its platform, plinth, walls, pilasters flanking the doorways and the central pillars. In fact, the faces of the structure are mellowed with joy and rhythm of life depicted in its wonderful varieties. But one cannot help noticing its resemblance in general layout to the *bhoga-maṇḍapa* (hall of offering) of the Liṅgarāja temple of Bhubaneswar.[1] With the narrow space compartmented into bays by thick pillars of large girths, the interior is more suitable for a banquet in honour of the deity than for a musical soirée or a religious

[1] It is likely that the *nāṭa-mandira* connecting the porch and the *bhoga-maṇḍapa* of the Ananta-Vāsudeva and Liṅgāraja temples of Bhubaneswar was added even later than the *bhoga-maṇḍapa*.

audience listening to a teacher. Further, the southern stair of this structure directly faces the kitchen-entrance.

UPĀNA.—It consists of three uncarved mouldings —*khurā*, *noli* and *basanta*, the first slightly projecting forward beyond the plumb of the other two.

BERM.—*Pañcha-ratha* on plan, the berm (pl. XXIII) has five vertical components. The usual *pābhāga*-mouldings (*khurā*, *kumbha*, *paṭā*, *kaṇi* and *basanta*) do not run continuously but are limited to small sections at the corner of the *rathas* and are nearly lost in the abundance of pilasters and *khākharā-muṇḍis* that intervene between these sections. In the niches of the *khākharā-muṇḍis* are figures, mostly *kanyās* and very exceptionally erotic couples, while the pilasters, generally two each on either side of the *khākharā-muṇḍis*, have each a female figure beneath the roof of a *vajra-muṇḍi*. These damsels are shown in their usual postures—with arms raised over the head, adjusting the scarf, holding the branch of a tree or a flower, playing on musical instruments like small cymbals and *vīṇā*, caressing a pet bird, fondling a child, wringing water from the wet hair (the drops falling from it being drunk by a goose), carrying a *chāmara*, exhibiting her beautiful person in various inviting flexions, engaged in toilet and with folded hands. Rarely a man with a yoke takes the place of the *kanyā*.

The lower *jāṅgha* has *vajra-muṇḍis* over both the *pābhāga*-mouldings and *khākharā-muṇḍis* of the *pābhāga* and pilasters over the pilasters of the *pābhāga*. On the pilasters are figures, generally women and rarely men, and grotesque comical figures with an expression of good humour. These, with rare exceptions, are all dancing, with or without musical instruments, some even with a sword. Among the standing figures two (on the northern flank of the east face)

pot-bellied men, looking like *pāṇḍās*, appear rather humorous. Some of the niches of the *vajra-muṇḍis* near the corners contain several seated *dikpālas*—Yama, Nirṛiti, Varuṇa, Vāyu and Kubera. The remaining niches have, besides an elephant, figures both mundane (some on elephants and horses) and divine, the last including Gaja-Lakshmī and Gaṇeśa.

In the *bāndhanā* are three mouldings—*khurā*, *noli* and *basanta*—the first with a creeper at the *muhāṇṭi* and lotus-petals on the body, the second with lotus-petals and a central beaded line and the third with elephants.

The disposition of the upper *jāṅgha* is similar to that of the lower. Those *vajra-muṇḍis*, which are in plumb with the ones having *dikpālas*, have, however, in the niches the female counterparts of these *dikpālas* with identical attributes. Among divine figures in the niches of some other *vajra-muṇḍis* are recognizable Gaṇeśa and the *dikpālas* Īśāna and Agni.

In the *varaṇḍa* are three mouldings—*khurā* with a row of geese at the *muhaṇṭi*, *paṭā* wih a creeper and *basanta* relieved with infantry, cavalry, elephants with or without soldiers, palanquin-bearers, provision-carriers and assemblage before a king. The recess between the mouldings is relieved with a honeycomb pattern. Inside the *varaṇḍa* are provided at intervals spouts of drains for the drainage of water, that falls on the top of the berm. Some of these spouts are utterly vulgar in conception.

STAIRS.—The top of the berm is approached by flights of steps, on the central part of all the four sides. The staircases of the east and north sides cover portions of the carved façade of the platform; evidently, either their parapets were an afterthought or the width exceeded the original specification. The façade of the parapets of the eastern

stair, though designed after that of the berm, was left uncarved. The rough outlines of the mouldings in the *bāndhanā* and *varaṇḍa* and the plain pilasters of the upper *jāṅgha* are made in the parapets of the northern staircase. The individual steps of the latter are in the form of moon-stones. In the southern stairway are roughly fashioned *bāndhanā*- and *varaṇḍa*-mouldings.

The original scheme of the western stair was probably like that of the others; but, later on, it gave place to a double flight, one facing the south and the other north. This was, no doubt, dictated by necessity, as the space between the *bhoga-maṇḍapa* and porch could not happily accommodate the flight if it ran straight towards the west in view of the provision of Aruṇa-*stambha* and the two colossi in front of the eastern stair of the porch. The altered arrangement thus resulted in covering a large part of the sculptured façade of the berm. The face of the central projection of this stair is carved in the likeness of the berm, but the carvings are only partially preserved due to the loss of the facing stones.

PLINTH.—Over the berm is the plinth of the *bhoga-maṇḍapa*. Its façade, with multiple projections, has three horizontal divisions, the lower with a succession of *khurā*, *noli* and *basanta* and the upper with *khurā*, *kaṇi* and *basanta*, all decorated in their characteristic manner. The recessed part between these two divisions has *khākharā-muṇḍis* with figures in their niches, lions rampant on elephants and oblong niches with *kanyās* or male figures. A male musician with small cymbals in hands has below his floral foot-stand a short inscription.

BĀḌA.—The layout of the *bāḍa* is analogous to that of the berm, but the mouldings in the *varaṇḍa* are larger in number, and we have here, in place of the

vajra-muṇḍis, *khākharā-muṇḍis* and *piḍā-muṇḍis* (one each on the *kanika* and *anuratha*) respectively in the lower and the upper *jāṅghas*. The *varaṇḍa*-mouldings number nine at places, but at others they are only six from the topmost of which elaborate lotus-drops project. Except on the northern face, there are wide openings between the *anuratha* and *kanika*. The *khākharā-muṇḍis* of the *kanika* contain the eight *dik-pālas* in their respective directions. The female counterparts of Indra, Agni, Yama and Nirṛiti are extant above these gods in the niches of the *piḍā-muṇḍis* of the upper *jāṅgha*.

The floor is reached by spacious openings in the centre of the four sides, each opening approached by a flight of four steps. On either side of these openings is a pilaster with five *pābhāga*-mouldings at the base and round shaft carved with vertical bands of creepers, having dancers and musicians at the base and *kīrti-mukhas* with pendant pearl-strings above. Over the last and crowning a set of three mouldings—*noli*, *khurā* and *basanta*—is a *pheṇi*-shaped capital with lotus-petals. Above the capital is again a set of three mouldings, from the top of which project lotus-drops.

INTERIOR.—In the central part of the floor are four large pillars, arranged in a square. They also have five divisions. Of the five mouldings of the *pābhāga*, the lower two are not carved. In the *bāndhanā* are three carved mouldings. The upper and lower *jāṅghas* are divided into facets and recesses. The central facets of both the *jāṅghas* and also recesses of the upper *jāṅgha* have musicians, dancers, devotees, *chāmara*-bearers and *kanyās*. The recesses in the lower *jāṅgha* have lions rampant on elephants.

ROOF.—The missing roof of the structure was possibly of the *piḍā* type. The beautifully-carved

stone forming the crowning piece of a ceiling, which was found by the side of this structure and which now lies in the Museum, presumably belonged to it. The motif on this stone is very artistically conceived in the form of a full-blown lotus (pl. XXIV). On the projected pericarp presides Sūrya, with the stalk of a lotus in each hand, seated cross-legged on a seat drawn by seven horses. He is attended by a female figure on either side. Around the pericarp are eight petals, beyond which are spread in a circle sixteen petals, each containing a dancer. Most of these dancers also play on musical instruments. Evidently, these figures represent the celestial choristers who seem to chant the eternal glory of the Sun.

B. Temple 2 (Māyādevī temple)

To the west-south-west of Temple 1 is Temple 2, consisting of a sanctuary and a porch, the latter fronted by a platform. Around it is a narrow apron of khondalite. Since the reclamation of the temple from sand in the first decade of the present century (p. 20), it has assumed its present name as the temple of Māyādevī, who is popularly believed to be one of the wives of Sūrya. In reality, this temple was meant originally for Sūrya, a presumption substantiated by its *pārśva-devatās*. That this temple with its own compound-wall of laterite was earlier than Temple 1 is proved by the southern wall of the present enclosure itself. In the western flank of this wall exists an opening which served as the southern gate of Temple 2 and was blocked up with the construction of the larger enclosure of Temple 1. The front (east) and the north walls of the earlier enclosure were dismantled when Temple 1 with its enclosure was built. The south-eastern corner of this earlier enclosure is still

distinctly perceptible in the extant southern wall. It is not known if an image of one of the wives of Sūrya was consecrated in it after the erection of the new temple, Temple 1. The pedestal inside the sanctum was found empty even when the temple was unearthed. It has been surmised by some that the image, called Rāmachaṇḍī, which is now in worship in a temple on the sea, 8 km. south-west of Konarak, was in this temple, as there is a tradition current among the local people that Rāmachaṇḍī left Konarak stealthily when the Muslims under Kālāpāhāḍ overran the temple.

The platform

In front of the porch and in continuation of its *pishṭa* is a platform. Its façades are relieved with *khākharā-muṇḍis*, each alternating with a *vajra-muṇḍi*. The niches of the *khākharā-muṇḍis* on the north and south sides contain erotic figures, while those of the *vajra-muṇḍis* have, besides the erotic ones, other figures, both male and female. The two *khākharā-muṇḍis* of the front side contain each a fierce-looking door-keeper leaning on his staff. Each of these was flanked on either side by a pilaster with a niche having a single figure—a female *chāmara*-bearer in the case of the two immediately flanking the flight of four steps which give access to the platform.

The pishṭa

Both the sanctuary and the porch are built on an effectively-composed *pishṭa*. The latter is made of three mouldings—*khurā*, *kaṇi* and *basanta*—the first most projected and the last most receding. The *muhāṇṭi* and the body of the first are decorated

respectively with scroll-work and lotus-petals (each petal alternating with a pendant), while the *basanta* is relieved with a variety of motifs like cavaliers, elephant-riders, foot-soldiers, carriers of provisions, musicians, dancers, assemblage before a king, a king witnessing dance and music, a king on horseback, duel, fighting, hunting of animals, confronting and catching of elephants and animals carrying supplies. The washings from the interior of the porch are carried through a channel cut partly into the floor and the bottom course of the central part of the northern wall. At the outer end of the drain is a chlorite gargoyle fixed in the topmost moulding of the *pishṭa* and supported by a pilaster. The gargoyle is in the form of the head of a crocodile with a fish in its mouth.

The porch

The *bāḍa* of the porch is *sapta-ratha* on plan, if we take into account the thin projection flanking the inner side of the *kanika*. It had five vertical divisions, of which the lower three are now extant.

PĀBHĀGA.—Between the *pābhāga*-mouldings of the *rāhā, anurāhā* and *kanika* are inserted three *khākharā-muṇḍis* with two pilasters entwined by a *nāga* or a *nāgī* in between. The central *khākharā-muṇḍi*, the largest of the three, has a niche with couples, *kanyās* or erotic figures, while the body of the outer ones are shafts with facets containing floral motifs, foliated leaves and scroll-work within beaded borders. The *nāga*-pilasters, with two lions-on-elephants above the lowest two mouldings, are capped by a highly stylized *chaitya*-window motif.

JĀṄGHA.—On the *kanika* and the *anurāhā* of the lower *jāṅgha* is a central *khākharā-muṇḍi* flanked on

either side by a graceful female on a lotus and a pilaster with a carved faceted shaft and a set of three mouldings at its base and at the top. In the niches of the *khākharā-muṇḍis* of the *kanika* are *dikpālas,* of whom Yama with a noose on his buffalo, pot-bellied bearded Varuṇa with a noose and a rosary on a trotting *makara,* Vāyu with banners in hands on a trotting deer, Kubera seated on a lotus above five *ghaṭas* and ithyphallic four-armed Īśāna with a trident on a bull are extant. The *khākharā-muṇḍis* of the *anurāhā* contained *grahas,* of which four, including Rāhu and Ketu, are preserved. On the *anuratha* is a pilaster-like *khākharā-muṇḍi* with a *kanyā* within the niche. In the recesses between the *rathas* are lions rampant on elephants. The extant portion of the *rāhā* above the *pābhāga*-mouldings on the north and south sides has each an elaborately-carved balustraded window. The balusters, four in number, have females—two as musicians with small cymbals and a *vīṇā*—on a foliated lotus under a tree with two mouldings crowned by an ornate *chaitya*-window above. The faceted frame around the balusters is relieved with creepers and beaded borders. The pilaster-like projection on either side of the frame has a female on a lotus on the central facet and creepers on the flanking facets of both the front and side faces.

In the frontal *rāhā* is provided the passage leading to the door. The floor of the passage is in the form of a large moon-stone. On either side of the entrance to the passage is a *pañcha-ratha* pillar, attached to the projection of the *rāhā.* The base of these pillars has a set of five mouldings—*khurā, kumbha, paṭā, kaṇi* and *basanta.* A small section of the roundish shaft with three inconspicuous projections having medallions is now extant. Its body is relieved with vertical bands, the latter carved with creepers,

scrolls and foliated leaves within beaded borders. The extant portion of the outer sides of the *rāhā* have each a set of five *pābhāga*-mouldings and a *khākharā-muṇḍi*.

BĀNDHANĀ.—In the *bāndhanā* are five mouldings—*khurā, noli, paṭā, noli* and *basanta,* the first, third and fifth carved with creepers.

INTERIOR.—The inner walls of the porch have at intervals *pābhāga*-mouldings. Over each set of the latter is a *kanyā* on a lotus within a richly-carved framed niche. Over the *kanyās*, flanking the two entrances, and the corbelled recesses[1] for the windows are three *bāndhanā*-mouldings in the form of *khurā, noli* and *basanta.* Above these mouldings again is a *kanyā* within a framed niche, the latter capped by three extant mouldings—*khurā, pheṇi* and *paṭā.* Over the niche of the *kanyā* above the *pābhāga*-mouldings at four corners is a faceted projection carved with a row of elephants. These projections are capped by squinches in the form of corbels placed across the angles of the square room. The corbels (two alone preserved) at the corners were evidently intended for converting the square into an octagon to facilitate the spanning of the roof. The façades of these corbles have friezes with a creeper or scroll-work below. The themes of the friezes include the march of an army consisting of cavalry, elephants and foot-soldiers sometimes including men carrying military supplies, battle-scene sometimes with the defeated hastily retreating and the court of the king in the military camp. The king is seen seated on a footed seat with a bolster behind him amidst his attendants and sometimes with the vanquished standing with folded hands in front.

[1] The lintel over the northern corbelled niche has a frieze of elephants without riders, cavaliers and infantry with scroll-work crowning a beaded line below.

JUNCTION BETWEEN THE PORCH AND SANCTUARY.—It has at the base the usual *pābhāga*-mouldings. In the lower *jāṅgha* is a standing image of Sūrya with stalks of lotuses in hands depicted inside a *khākharā-muṇḍi*. The chariot is drawn by horses, the charioteer being Aruṇa. On either side of the deity is a warrior with a shield (?) and a sword (?). At the top corners is a flying *vidyādhara*.

The sanctuary

Sapta-ratha on plan, the *bāḍa* had presumably five divisions, of which only the *pābhāga* and a small part of the lower *jāṅgha* are now preserved.

PĀBHĀGA.—It has the usual five mouldings—*khurā*, *kumbha*, *paṭā*, *kaṇi* and *basanta*, the *rāhās* being distinguished by a central *khākharā-muṇḍi* between two pilasters entwined by *nāgas* and *nāgīs*. The niches of the northern and southern *muṇḍis* contain each an erotic couple, while in the western one is a six-armed ithyphallic bejewelled Naṭarāja, carrying in the two uppermost hands a snake and in middle right and left respectively a kettle-drum and a trident. The remaining two hands are in dancing pose, the left waving towards the right knee and right in *abhaya-mudrā*. The two followers of the deity are also in a dancing pose, while his bull looks up towards him. On the northern side, placed against the top moulding of the *pishṭa* and the *muhāṇṭi* of the *khurā* of the *pābhāga*, is a chlorite gargoyle shaped like a *makara* head for draining water outside from the sanctum. In the rolled trunk of the *makara* are perched two fierce-looking figures.

KANIKA AND ANURĀHĀ OF THE LOWER JĀṄGHA.—In the *kanika* and *anurāhā* of the lower *jāṅgha* are *khākharā-muṇḍis*. The niches of the *muṇḍis* of the

kanika contained *dikpālas*. Among the latter, Agni alone exists in the south-eastern corner. The bearded and pot-bellied deity, with a bowl of flames in his left hand and a rosary in the right, is seated in *lalitāsana* on his trotting mount, a goat. Of the niches of the *khākharā-muṇḍis* on the *anurāhās*, the eastern one of the northern side contains a relief of standing Sūrya, flanked on either side by a warrior with a shield and sword. The upper portion of the deity above the waist is missing. Near the feet of Sūrya is depicted Aruṇa holding the reins of seven chargers.

Two architectural fragments, which possibly formed part of the *muṇḍis* of the *jāṅghas* of this temple, are now housed in the Museum. In one a divine figure (Kāmadeva ?), with flying *vidyādharas* at corners, is seen standing with flexion. In his left hand is a bow, the arrow in right hand being broken. The other, which must have been in one of the *piḍā-muṇḍis* of the *kanika* of the upper *jāṅgha*, represents the *śakti* of Varuṇa, seated in *lalitāsana* on a composite *makara*, with a noose in her left hand and a rosary in the right, the latter in *varada-mudrā*. A third slab, possibly belonging to one of the *muṇḍis* of this temple, is now on the pedestal of Temple 3. It depicts the upper half of an image of Sūrya with the stalk of a lotus in each hand.

PĀRŚVA-DEVATĀS.—In the niches of the three *rāhās* were the chlorite images of the *pārśva-devatās*, of which those on the north and south sides are now *in situ*.

The image in the northern niche represents Bhāskara seated, like the northern *pārśva-devatā* of Temple 1, on the back of a horse. The latter, an ill-executed one, stands on a *pañcha-ratha* pedestal made of three mouldings—*khurā*, *kaṇi* and *basanta*. Clad in a short *dhotī* and a diaphanous coat of mail and

with booted feet supported by a lotus each, Sūrya (both the forearms with attributes missing) is decked in a girdle, an *upavīta*, armlets, a necklace, a necklet, *padma-kuṇḍalas* and a richly-bejewelled high *mukuṭa*. On either side of his legs is a follower, armed with a sword and a buckler, standing against a *khākharā-muṇḍi*. Above both is a female *chāmara*-bearer, standing on a lotus. The back portion of the main figure is cut out. Around the head of the deity is a trefoil arch with tongues of flames around. At the crown of the arch is a *kīrti-mukha* with a pot-bellied flying *gaṇa* on either side. At the top corners of the oblong back slab (1·88 m. high and 91·4 cm. wide) is a booted *vidyādhara*, with a *vidyādharī* on the thigh and floral offerings in hands, flying through clouds.

The mutilated image[1] (head, entire right arm and left forearm missing) in the southern niche represents Sūrya, draped and decorated like the preceding but standing in *sama-pāda* on a pedestal which rests on a lotus with stalks underneath. The two warrior-companions and the sinister *chāmara*-bearer are now preserved.

The image in the western niche was most probably the one found in the *bhoga-maṇḍapa* (p. 20), as the dimensions of the sculpture, 1·88 m. high and 89 cm. wide, tally with those of the other two *pārśva-devatās*. The composition here, however, is more elaborate and the workmanship is fine. The sculpture is now displayed in the National Museum.

Except for the forearms, the image (pl. XVII B), which is remarkable for its sensitive modelling, is in a perfect state of preservation. Clad in a short diaphanous *dhotī*, held by a richly-embellished girdle

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[1] The extant sculpture is 90 cm. wide, the available height being 1·40 m.

with beaded loops and a central pendant issuing from a *kīrtí-mukha*, long boots or socks and a coat of mail on the chest, Sūrya is lavishly decked in ornate armlets, an elaborate necklace of six beaded strings with a central clasp and oblique pendants, a beaded *hāra*, a beaded neck-ornament, an *upavīta* of three beaded strings with beaded oblique pendants, *padma-kuṇḍalas* and a richly-decorated high crown with a lotus-finial. With a smiling face and with the stalk of a full-blown lotus in each hand, the figure (with back portion cut out and roughly fashioned) stands in *sama-pāda* on a *tri-ratha* chariot. The horses are depicted in front of the chariot—three between two moulded posts on the *rāhā* and two each on the *kanika*, the latter having at the exterior end a moulded post. The rein of the horses is held by Aruṇa (with only upper half of the body) who, with a lash in his raised right hand, is seated between the two feet of Sūrya. Near the right leg of the deity is the bearded Daṇḍī, his left palm resting on a staff. The corresponding figure near the left leg represents the bearded and pot-bellied Piṅgala with an ink-pot in his left hand and a pen (?) in the right. Beyond Daṇḍī and Piṅgala is a richly-embellished standing warrior with a sword in his right hand and a buckler in the left, carved against a *khākharā-muṇḍi*. Over each *khākharā-muṇḍi* is a female with the stalk of a lotus in hand. Around the head of Sūrya is a trefoil arch with tongues of flames around and a *kīrti-mukha* at the crown. This arch springs from two pedestals, the façade of which is carved with scroll-work. On the left pedestal is a booted cavalier with a sword in his right hand and on the right a man playing on a *vīṇā*. Near the top corners is a *vidyādhara* flying through clouds.

DOOR-FRAME.—While the sill is of chlorite, the

jambs are made of khondalite. The façade of the former is in the form of a moon-stone. Boldly relieved with lotus-petals and foliated pattern within a beaded border, it has a conch at each end. The flanking portions, in continuation of the moon-stone but below the jambs, are also of chlorite. Their façade, *tri-ratha* on plan, is relieved into two moudings—*noli* with lotus-petals and *paṭā* with foliated pattern. Each jamb is divided into three gradually projecting facets. At the base of the innermost facet, which is the most recessed, is a *vajra-muṇḍi* with Gaṅgā (on the dexter jamb) and Yamunā (on the sinister), standing with a *ghaṭa* on their respective mounts—*makara* and tortoise. The base of the middle facet of both the jambs has a *khākharā-muṇḍi* with an amorous couple preserved on the sinister, while that of the outermost facets is relieved with a *piḍā-muṇḍi*. Both the *piḍā-muṇḍis* contain a four-armed figure, the sinister pot-bellied and terrible-looking with a snake for the sacred thread (*upavīta*). The dexter figure carries a broken object (staff or trident) in its lower left hand and in upper left and right hands a kettle-drum (?) and rosary respectively, the lower right being in *varada-mudrā*. The remaining portions of the jambs are also carved, of which the outermost has a double coil of two snakes and the middle *ḍālimāṅkuḍi* (p. 59).

The moon-stone is fronted by another plain khondalite moon-stone, serving as a step from the passage between the porch and the door.

INTERIOR.—The three walls of the sanctum have each a central recess. The khondalite relief of Sūrya, which is now fixed in a roughly-made low platform, is an architectural piece. Evidently, it was inside the niche of one of the *muṇḍis* of the *jāṅgha* of this temple.

ARCHITRAVES.—Near the steps leading to the platform lie two fragments of two khondalite architraves. The larger piece preserves four *grahas*—Śukra and Śani, both with a *ghaṭa* (broken) in the left hand and rosary in the right, seated cross-legged on a lotus, Rāhu (upper half only depicted) with a crescent in the left hand and a disc (?) in the right and the snake-tailed Ketu with both hands raised. Each of these *grahas* is shown within a *piḍā-muṇḍi*, the latter's roof flanked by a lotus-stalk on either side. On the smaller piece occur only Śani with a *ghaṭa* in his left hand and a rosary in the right and Rāhu with a crescent in his left hand and a disc in the right. These pieces apparently formed part of the two architraves which originally rested over the door-frames of the porch and the sanctuary.

The dhvaja-stambha

In front of the platform, a few metres away, is a small laterite block of masonry, evidently the core of the platform which supported the base of the *dhvaja-stambha*.

C. TEMPLE 3 (VAISHṆAVA TEMPLE)

To the south-west of Temple 2 is a small temple, Temple 3, exposed in 1956. Facing east, the temple, which stands to a maximum height of 2·13 m., consists of a sanctuary and a porch, both *pañcha-ratha* on plan. Made of large bricks, it was covered with a plaster of lime and sand. The superstructure of both the components is now missing. The discovery of this temple, which is Vaishṇava in religious affiliation, proves that deities other than Sūrya were also honoured within the enclosure of this Sun temple. The existence of

the temple coupled with three reliefs (p. 46) depicting the worship of Mahishāsuramardinī, Jagannātha and *liṅga* proves that there was no religious exclusiveness in this centre.

The porch

EXTERIOR.—Of the five divisions of the *bāḍa*, the *pābhāga* is composed of three mouldings-*khurā, kumbha* and *basanta*, the *rāhā* portion of the north and south faces being further distinguished by the addition of a miniature representation of a *deul* at the central part. The *anuratha* and the *kanika* have a single moulding for the *bāndhanā*, *khākharā-muṇḍis* on the lower *jāṅgha*, *piḍā-muṇḍis* on the upper *jāṅgha* and four mouldings—*khurā, pheṇi, noli* and *paṭā*—in the *varaṇḍa*. In the lower portion of the *rāhā*, above *pābhāga*, of both the north and south sides is a window with three sandstone balusters. The *rāhā* of the east side is more projected than the others, as in it is provided the stone door-frame, of which the lower portions of the jambs and the sill, in the form of a plain moon-stone, alone are *in situ*. Two thin strips of the *rāhā*, each edging the outer end of the jambs, project forward; evidently they sustained the architrave projecting from the lintel. Each of the two jambs has an oblong niche below and three facets (in three different planes) above. Inside each niche is a fierce-looking door-keeper, with coiled hair rising upwards like flames, holding a staff in one hand, the other hand being in *abhaya-mudrā*.

INTERIOR.— The ceiling of the porch is spanned by corbels, of which the lowest two are now extant. The north and south walls have each a corbelled niche inside, in the rear end of which is the balustraded window noted above.

The sanctuary

BĀḌA.—As in the porch, the *bāḍa* of the sanctuary has fivefold vertical divisions, of which the *pābhāga*, lower *jāṅgha*, *bāndhanā* with *khurā* and *basanta* mouldings and upper *jāṅgha* are preserved. In the *pābhāga* are four mouldings—*khurā* capped by a tiny *khurā*, *kumbha*, *paṭā* and *basanta*. The *rāhā* of the *pābhāga* is distinguished by the insertion of a projected *rekha*-miniature between the usual *pābhāga*-mouldings. Through the *rekha*-miniature of the north side runs a channel for draining water out of the sanctum. Both the *jāṅghas* are plain, the three *rāhās* having, however, an oblong niche each for a *pārśva-devatā*. The faceted jambs of these niches are of bricks, but the lintels are of khondalite. Over the architrave above the frames of these niches is a projected sloping *chhajjā*.

PĀRŚVA-DEVATĀS.—Two of the *pārśva-devatās*, made of chlorite, were *in situ* when the temple was unearthed. They are now in the Museum. The image (66 cm. high, 33 cm. wide and 15 cm. thick), which was in the southern niche, represents the four-armed form of the boar-incarnation (Varāha) of Vishṇu. Clad in a *dhotī* and richly bejewelled, Varāha stands on a double-petalled lotus, his slightly bent left foot resting on the tail of a seated *nāgī*. Of the hands, the lower left holds a conch and upper right a wheel, while the lower right catches hold of the standing Bhūmi-devī, the latter again depicted as seated with folded hands on the god's upper left arm.

The corresponding image (66 cm. high, 31 cm. to 35·5 cm. wide and 14·5 cm. thick) in the northern niche depicts the four-armed Trivikrama carrying in his lower left hand a conch, upper left a wheel, upper right a mace and lower right a full-blown lotus. The

left foot of the deity, lifted to the level of his forehead, supports a lotus on which is perched the four-armed and bearded Brahmā. Near his right leg is represented the gift of Bali to Vāmana, the latter holding an umbrella. A third figure, evidently Śukra, is in the attitude of warning Bali against the fatal gift.

The western niche is empty. Evidently, it contained Narasiṁha, the third *pārśva-devatā* usually associated with a Vaishṇava sanctuary in Orissa. In the Museum there is the lower part of a chlorite image (33 cm. wide and 15 cm. thick, the extant height being 40·5 cm.) of Narasiṁha found during an earlier sand-clearance. Its width and style of workmanship leaves no room for doubt that the sculpture originally formed the western *pārśva-devatā* of this very temple. In the extant portion of the sculpture, Narasiṁha, flanked on either side by a female standing on a lotus and holding the stalk of a bud, is seen piercing the belly of Hiraṇya-kaśipu, the latter lying on his back on the left thigh of the deity.

DOOR-FRAME.—The khondalite door-frame of the sanctum is intact. On its plastered surface are traces of chocolate-red paint. The sill simulates a moon-stone. At the bases of the southern and northern jambs are respectively Gaṅgā standing with flexions on a *makara* and Yamunā on a tortoise. Draped in a *dhotī* and a scarf and bejewelled in anklets, a girdle, *valayas*, armlets, *hāras*, ear-studs and a high crown, Gaṅgā, within a trefoil arch, carries in her left hand a *ghaṭa*, the right palm resting against the right thigh. The attribute in the right hand of Yamunā, with ornaments similar to Gaṅgā, is damaged. The remaining portion of the jambs are divided into three facets.

The lintel with three facets has at the centre an inset. The latter contains within an arched niche

Lakshmī, seated in *lalitāsana* with the stalk of a lotus in her left hand and *vara* in the right. Two elephants, perched on lotuses, are in the attitude of pouring water over the goddess. The lintel was originally supported by an iron beam, the chase for which exists in the bottom face of the lintel. The wooden door behind the stone frame had two leaves, as indicated by two sockets made in the stone ceiling of the passage immediately edging the stone frame.

INTERIOR.—The three walls of the sanctuary have each a central recess. Against the back wall, extending from the south wall to the north, is a brick pedestal, *tri-ratha* on plan, its façade relieved with two mouldings with a recess in between. It is covered with thick plaster. The long pedestal, which most probably contained more than one image, was found empty. Presumably, one of these images was the one representing Vishṇu, found in 1906-07 during clearance of débris around the sanctuary of Temple 1. The figure of Vishṇu, with the beautiful expression of the face lit with a faint smile and excellent modelling, is an exquisite piece of the Orissan art. Lavishly decorated, the deity stands in *sama-pāda* on a double-petalled lotus. His upper left and right hands carry respectively a conch and a wheel, while the lower right, with a tiny lotus-mark on the palm, exhibits *varada-mudrā*. The remaining attribute, evidently a mace, along with the forearm is broken. Thus, the figure conforms to the Janārdana form of Vishṇu as enjoined in the *Agni-Purāṇa* and the *Chaturvarga-chintāmaṇi* and to Vāsudeva according to the *Padma-Purāṇa*. The image (96·5 cm. high and 49·4 cm. wide) is now in the National Museum, New Delhi.

The other image was most probably of Balarāma. A chlorite sculpture (95 cm. high and 48 cm. wide)

of the two-armed form of this deity, found in 1906-07 and stylistically bearing a close affinity with Varāha and Trivikrama, is now in the Museum. The attributes in both the hands along with the forearms of the deity, who has a seven-hooded canopy behind his head, are missing.

The probable grouping of Vāsudeva and Balarāma in this temple may lead to the conjecture that, to complete the group, there was an image of Ekānaṁśā-Subhadrā as well, as in the Jagannātha temple at Puri, the Ananta-Vāsudeva temple at Bhubaneswar and the Ananteśvara temple in the Liṅgarāja compound at the latter place. But no such image has yet been recovered.

The dhvaja-stambha

In front of the door of the porch is the fragment of a round column on a square base. It has a central socket which held the upper portion. When intact, it was, no doubt, a *dhvaja-stambha*, the crowning piece evidently representing Garuḍa. There is a kneeling figure of chlorite (30·5 cm. wide, the extant height including the uncarved pedestal being 43 cm.) in the Museum. As the portion above the neck of the figure is missing, it is not known if it represents Aruṇa or Garuḍa. In case it is Garuda, it might have crowned the column in front of this Vaishṇava temple.

D. Subsidiary structures

There are several subsidiary structures, all reduced nearly to their plinths, within the enclosure.

The kitchen

To the south of the *bhoga-maṇḍapa* is a laterite structure which served as a kitchen for the cooking

of the *bhoga*. Its entrance, flanked on either side by an oblong platform of laterite, directly faces the southern staircase of the *bhoga-maṇḍapa*. Three sides of these platforms have a *khurā* at the base and an inverted *khurā* at the top, the space between these mouldings being recessed. The bottom portion of the sinister jamb of the door-frame is still *in situ*.

With a central oblong courtyard, the structure is roughly of the *chatuḥ-śāla* type, the east and west wings, however, being much narrower than the other two flanks. The south and the north wings have three rows of pillars and the west a single row near the inner edge, the eastern wing having none at present. The pillars are of two types. The majority of them are of laterite and have a square base and an octagonal shaft with a central moulding. The rest are thinner and are made of khondalite. Most probably these belonged to an older structure. The sides of the wings facing the courtyard evidently had no walls.

In the southern wing there is an oblong platform of khondalite slabs with a raised rim and two channels. One of the latter is in plumb with the head of a drain which led washings outside beyond the east wing of the kitchen. The platform evidently served as the place where the cooks used to strain off the gruel from rice after cooking. The portable monolithic cistern, which now lies by its side, was found in the eastern flank of the northern wing. Against the latter's north wall, though outside near the eastern platform, was found a second, but larger, cistern which has been removed to the platform of Well 2 (p. 105). These cisterns were utilized for storage of water. In the western wing there is a roughly-made pavement of khondalite slabs. Many of the latter have a depression due to the pounding of spices. Roughly in the centre of this pavement is a mortar with a deep cavity for

pounding grains and husking rice. A fragment of a khondalite triple oven, which was found some metres to the west of the kitchen, has now been kept in the southern wing, near the south-west corner.

Well 1

The well pertaining to the kitchen is in front of the eastern flank of the north side of the latter. Its mouth is faced internally with a course of khondalite slabs, the portion below it being veneered with large bricks. Against its eastern face are fixed at intervals stone foot-rests for getting down. Made of khondalite, the low parapet above the mouth of the well is moulded in the form of a *khurā*. On this parapet, at several spots, there are round depressions caused by the placing of water-pots. The quadrangle around the well is paved with khondalite slabs. Around the quadrangle was a brick wall, pierced with an entrance on the west side. The entrance is guarded by two pilasters, relieved with mouldings. During clearance of the well was encountered a small chlorite image of the four-armed standing Gaṇeśa, now displayed in the Museum.

Structure 1

Immediately to the north of the well is the oblong plinth of a six-pillared *maṇḍapa*. The pillars, in two rows, are of khondalite, while in the walls of the plinth are utilized not only khondalite and laterite slabs but also bricks. The topmost course of the plinth is moulded into an inverted *khurā*.

Structure 2

To the west of Well 1, near the north-western corner of the kitchen, is an oblong structure of laterite on a

platform, the latter being built mostly of laterite and partly of khondalite. The platform, which has a *khurā* at the base and an inverted *khurā* at the top, has on the north side a central projection, which is approached by a flight of steps. On either side of the latter, but abutting against the projection, is a pilaster. The front face of the platform along with the projection has an additional inverted *khurā* at the top. The entire structure was originally plastered.

Structure 3

To the north of Structure 2 is a small *maṇḍapa*, made partly of khondalite and partly of laterite. Its missing roof rested on four pillars, the stumps of which are now *in situ*. The plinth, *pañcha-ratha* on plan, has a moulding at the base and inverted *khurā* at the top. On the floor is fixed a large squarish slab of khondalite. It has a round socket at each of the four corners. These sockets were meant for posts which evidently supported a canopy for some ceremonies. Two semi-circular steps, placed against the central part of the north wall, give access to the floor of the *maṇḍapa*.

Structure 4

About 27 m. to the north of Structure 3 is the ruined *pañcha-ratha* plinth of a small structure of laterite. It has a set of three mouldings at the base and an inverted *khurā* for the top course. Its top is approached by a flight of steps fixed against its south wall.

Structure 5

To the north-north-east of the last is the plinth of a small khondalite structure, *pañcha-ratha* on plan. It

has a *khurā* at the base and a *noli* at the middle height. A large flight of steps, built against its north wall, gives access to the floor.

Structure 6

Immediately to its north is the oblong plinth of a fairly large *maṇḍapa*. Made of khondalite, the plinth, *pañcha-ratha* outside, has a set of three mouldings at the base, a *noli* in the middle and a set of four mouldings at the top. The roof of the *maṇḍapa* was supported by pillars, sockets for which exist on the paved floor. The latter is approached from the south side by a staircase, the moulded parapet of which has in front a pilaster with a set of three mouldings below and above. The structure probably served as a resting-place for pilgrims and devotees.

Well 2

To the west of Structure 6 and right in front of the northern staircase of the porch of Temple 1 is the second well, its inner facing and the parapet made of laterite masonry. Stone foot-rests, each a single block, fixed in its inner wall leads to the bottom of the well. Around the well is a low platform of laterite, approached by a flight of three steps, also of laterite. The top course of the platform, which was coated with plaster of shell-lime and sand, is moulded into a *khurā*. The well was probably intended for the visitors to the temple.

Structure 7

Immediately to the west and south-west of Well 2 is the plinth of a slightly oblong structure. The paved

passage leading to the east edge of its floor is flanked by two pylons, made of laterite. From the central part of the paved floor runs a channel, which drained water outside through an opening in the northern wall of the structure.

E. The enclosure

The temples, structures and wells described above are surrounded by a high compound-wall. The section of the wall, as available now, is T-shaped, the top course slightly projecting beyond the rest of the wall. The finds of some stone battlements by the side of the débris of the wall suggest that the enclosure had, as in the Jagannātha temple of Puri, a battlemented top. From the reports of the antiquarians of the nineteenth century it appears that many of these battlements were utilized in the additions to the compound-wall of the Jagannātha temple. The enclosure was made mostly of khondalite and partly of laterite and bricks,[1] the last limited to a length of 33·53 m. in the eastern flank of the south wall. The use of laterite is also limited, the regular masonry of this stone in portions of the west and south walls being of the earlier date (p. 86).

Gateways

The enclosure is pierced with two small gateways, one facing the east staircase of the *bhoga-maṇḍapa* and the other the south staircase of the porch of Temple 1. The former, the main entrance, which is mostly of laterite and partly of khondalite, presumably had a *piḍā* roof, the ceiling being spanned by corbels. Divided

[1] The brickwork, which was reduced to the last stage of decay, has been replaced by stonework during repair.

into *rathas,* its exterior body has five horizontal divisions with mouldings in the *pābhāga* and *varaṇḍa* and a plain broad band in the *bāndhanā*. There are two sockets in the walls flanking the jambs for holding the ends of a bar which closed the wooden door. Against the inner face of the north and south walls is a bench with a moulded façade. The structure was coated with plaster. In front of each of the two flanks of the front wall of the gateway is an oblong platform, which contains an extremely crude lion-on-elephant, made of several slabs, including a carved piece. Finished with a plaster of lime and sand, these animals were coloured in chocolate-red.

The south gateway of khondalite, with five divisions on its body, had a corbelled ceiling and possibly a *piḍā* roof. This, too, was plastered. On either side of this gate is a flight of steps made against the compound-wall, to give access to the latter's spacious top.

Compared to the temple, these gateways look rather insignificant. Evidently, they, along with the compound-wall, were built at a time when the resources had run down.

GLOSSARY OF TERMS

abhaya-mudrā, hand-pose, indicative of the gesture of protection. The hand showing this *mudrā* is raised with its palm outward and fingers all stretched.

alasa-kanyā, 'indolent damsel', female figures in various poses, usually on the walls of a temple, also called *nāyikā*. Cf. *kanyā*.

amḷā, gadrooned or fluted oblate spheroid resembling an *āmalaka* (*Emblic Myrobalan*) fruit, which, resting on the *beki*, forms an important component of the crowning elements of a *rekha* or a *piḍā* temple; *bhūmi-amḷā*, similar member, demarcating one set of mouldings forming a *bhūmi* (storeyed division of the *kanika-paga* of the *gaṇḍi* of a *rekha* temple) from another. See figs. 1 and 2, pp. 26 and 27.

amḷā-beki, see *beki*. See fig. 2, p. 27.

aṅgula, 'finger', width of a finger in the measurement of a temple.

añjali-mudrā, hand-pose, indicative of reverence. In this *mudrā* both the forearms rest against the chest and the slightly hollowed palms, with fingers erect or slightly bent, touch each other.

anurāhā, projection next to the *rāhā* (central projection) in *sapta-ratha* (see *ratha*) and *nava-ratha* temples.

anuratha, projection next to the *kanika-paga* in *pañcha-ratha* (see *ratha*), *sapta-ratha* and *nava-ratha* temples. See fig. 1, p. 26.

āyudha, weapon, implement, attribute in the hands of a deity.

bāḍa, 'enclosure', 'wall', vertical portion of a temple above *pishṭa* (see *pishṭa*) and below spire or roof. See figs. 1 and 2, pp. 26 and 27.

baḍa deul, 'big temple', meaning the sanctuary.

bāndhanā, 'bond', moulding (single or multiple) between two *jaṅghas* of a temple. See figs. 1 and 2, pp. 26 and 27.

basanta, name of the topmost moulding of *pābhāga*, *bāndhanā* and *varaṇḍa*.

beki (*beka*), 'neck', cylindrical member immediately above *gaṇḍi* and below *amḷā* of a *rekha* temple and above *gaṇḍi* and below *ghaṇṭā* of a *piḍā* temple; *amḷā-beki*, *beki* below *amḷā* and above *ghaṇṭā* in a *piḍā* temple. See figs. 1 and 2, pp. 26 and 27.

bhadra deul, 'auspicious temple'; it refers to the porch in front of a sanctuary.

bhoga-maṇḍapa, 'hall of offering'.

bhūmi, storey, stage, storeyed division of the *kanika-paga* of the *gaṇḍi* of a *rekha* temple. See fig. 1, p. 26.

bhūmi-amlā, see *amlā*. See fig. 1, p. 26.

chaitya-window motif, ornamental motif resembling the front window of an apsidal *chaitya*-hall of the early period.

chāmara, fly-whisk, fan made of the tail-hair of a yak.

chhajjā, projecting member, usually over doors, windows and niches, serving the purpose of eaves.

ḍālimāṅkuḍi, meandering creeper with frolicking boys on its branches used as a decorative motif (also known as *gelabāi* and *manushya-kautukī*).

deul, general name for a temple as a whole. When used singly, it refers to the sanctuary, as distinguished from the porch or festive hall.

dhvaja, flag, finial.

dhvaja-stambha, flagstaff, column with the mount or ensign of a deity as the crowning piece.

dikpālas, guardians of eight (four cardinal and four intermediate) quarters. They are Indra (east), Agni (south-east), Yama (south), Nirṛiti (south-west), Varuṇa (west), Vāyu (north-west), Kubera (north) and Īśāna (north-east).

dvāra-pāla, door-keeper, guard.

gaṇḍi, 'trunk', curvilinear spire or pyramidal roof above the *bāḍa* and below the *mastaka* of a temple. See figs. 1 and 2, pp. 26 and 27.

garbha-muda, lowest ceiling of a sanctuary.

gelabāi, see *ḍālimāṅkuḍi*.

ghaṇṭā, bell, bell-shaped member in the finial of a *piḍā* temple. It is also called *śrī* (*śiri*). See fig. 2, p. 27.

ghaṭa, water-pot.

grahas, planetary deities. They are Ravi (Sun), Soma (Moon), Maṅgala (Mars), Budha (Mercury), Bṛihaspati (Jupiter), Śukra (Venus), Śani (Saturn), Rāhu (ascending node) and Ketu (descending node). Often they are represented in a group on the architrave above the lintel of a doorway.

jagamohana, 'fascinator of the universe', hall in front of a sanctuary, usually a *piḍā* temple.

jāṅgha, 'shin', vertical portion of the *bāḍa* between projecting sets of mouldings; *tala jāṅgha*, the lower one between *pābhāga* and *bāndhanā* mouldings; *upar jāṅgha*, the upper one between *bāndhanā* and *varaṇḍa* mouldings. See figs. 1 and 2, pp. 26 and 27.

kalaśa, water-pot, pitcher-shaped member in the finial of a temple. See figs. 1 and 2, pp. 26 and 27.

kaṇi, moulding of angular profile.

kanika, kanika-paga, corner segment of a temple. See fig. 1, p. 26.

kāṇṭhi (*kāṇṭi*), recess between *piḍās*, mouldings or *poṭalas*.

kanyā, 'damsel', female figures in various poses. Cf. *alasa-kanyā*.

khākharā-muṇḍi, miniature representation of a *khākharā* temple as an ornamental motif. See fig. 3, p. 32.

khapuri, 'skull', flattish bell-shaped member above the *amlā* in the finial of a *rekha* or *piḍā* temple. See figs. 1 and 2, pp. 26 and 27.

khaṭvāṅga, a kind of club made of a long bone tipped with a human skull.

khurā, moulding with a somewhat S-shaped profile and a projected fillet at the base.

kinnara, semi-divine being with a body, half human and half animal.

kīrti-mukha, decorative motif showing the grinning face of a lion, from the mouth of which often issue beaded tassels.

kumbha, water-pot, moulding resembling the profile of a water-pot.

lalitāsana, sitting posture, in which one leg, bent, rests flat on the seat, while the other is pendant.

makara, a fabulous creature with the head of a crocodile and the body of either a fish or beast.

maṇḍapa, hall, porch.

manushya-kautukī, see *ḍālimāṅkuḍi*.

mastaka, 'head', crowning elements above the *gaṇḍi* of a temple. See figs. 1 and 2, pp. 26 and 27.

muda, ceiling.

mudrā, pose of the hand.

muhāṇṭi, projected fillet at the base of *khurā*, *piḍā*, *khapuri* or *khākharā*.

mukha-śālā, hall in front of a sanctuary, *jagamohana*.

muṇḍi, miniature temple, carved on walls as a decorative motif.

nāga, serpent, fabulous creature with a human bust, serpent-tail and hood over the head. Its female counterpart is known as *nāgī*.

nāṭa-mandira, festive hall.

nava-grahas, nine planetary deities. For their names, see *graha*.

noli, moulding roughly with a semicircular profile, torus.

pābhāga, division corresponding to foot, a set of mouldings constituting the lowest part of the *bāḍa* of a temple. See figs. 1 and 2, pp. 26 and 27.

padma-dhvaja, finial of a temple in the form of a lotus crowning a staff.

paga, segment.

pañcha-ratha, see *ratha*.

pārśva-devatā, accessory deities, occupying the niches of the central projections of a sanctuary. They vary according to the religious association of the temple. A Vaishṇava temple generally contains Narasiṁha, Trivikrama and Varāha, three of the incarnations of Vishṇu. A Saura temple has three forms of Sūrya.

paṭā, fillet-like moulding, sometimes with an inconspicuous *khurā* at the base and top.

pheṇi, moulding simulating the hood of a serpent.

piḍā, 'flattish wooden seat', projecting moulding constituting the pyramidal roof of a *piḍā* temple. See fig. 2, p. 27.

piḍā deul, temple of which the pyramidal roof is made of *piḍās*. This form of structure is usually limited to the *jagamohana*, *bhoga-maṇḍapa* and *nāṭa-mandira* in Orissa. See fig. 2, p. 27.

piḍā-muṇḍi, miniature representation of a *piḍā* temple as an ornamental motif. See fig. 3, p. 32.

pishṭa, stylobate, platform.

poṭala, group of *piḍas*.

rāhā, middle segment (of a temple) having the greatest projection. See fig. 1, p. 26.

ratha, segment produced on the outer face of a temple which has been subjected to projection. In a *tri-ratha* temple a central

exterior projection (*rāhā*) divides the wall into three *rathas*, the two on the outer sides being on the same plane and known as *kanika*. Temples with five, seven and nine such *rathas*, the result of the increase in projections on each face, are respectively known as *pañcha-ratha*, *sapta-ratha* and *nava-ratha*.

rekha deul, order of temple characterized by a curvilinear tower which presents the appearance of a continuous line. See fig. 1, p. 26.

sama-pāda, standing posture, in which legs are firm and erect without any bend.

sapta-ratha, see *ratha*.

siṁhāsana, seat with legs carved in the shape of lions.

srāhi, pan-shaped member in the spire of a *khākharā* temple.

śrī (*śiri*), bell-shaped member over the *beki* of a *piḍā deul*. See fig. 2, p. 27.

stambha, column.

ṭāṅku, projection in the form of a semi-circle, triangle or quadrant of a circle at the edge of *piḍās* or mouldings.

toraṇa, gateway in the form of an arch springing from two pillars.

tri-ratha, see *ratha*.

upāna, low plinth of a structure.

vajra-muṇḍi, variant of *khākharā-muṇḍi* with a highly intricate *chaitya*-window motif on the façade of the roof. See fig. 3, p. 32.

varada-mudrā, hand-pose indicative of conferring boon. The hand showing this *mudrā* is pendant with its palm outward and fingers all stretched.

varaṇḍa (written also as *baraṇḍa*), moulding (single or multiple), forming the topmost element of the *bāḍa* of a temple. See figs. 1 and 2, pp. 26 and 27.

varaṇi, name of the lowest moulding of *bāndhanā* and *varaṇḍa*.

vidyādhara, garland-bearing and flower-throwing semi-divine attendant of a deity. His female counterpart is known as *vidyādharī*.

vīṇā, a kind of stringed musical instrument.

virāla, lion (Sanskrit *vyāla*). The motif of a *virāla* rampant on an elephant or a demonish figure was very popular in Orissa. The representation of *virāla* is often fantastic. It is known as *gaja-virāla*, when it is provided with the head of an elephant, and *nara-virāla*, when it has the head of a man, often looking like a demon.

yaksha, a class of demi-gods.

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SELECT BIBLIOGRAPHY

A. Stirling, 'An Account, Geographical, Statistical and Historical of Orissa Proper, or Cuttack', *Asiatick Researches,* XV (Serampore, 1825), pp. 326-33.

J. Fergusson, *Picturesque Illustrations of Ancient Architecture in Hindostan* (London, 1848), pp. 27 f. and pl. III.

'Mr. Kittoe's Journal of his Tour in the Province of Orissa', *Jour. Asiatic Soc. Bengal,*VII, pt.II (1838), pp.681f. and pl.XXXVIII, fig. 2.

Rajendralala Mitra, *Antiquities of Orissa,* II (Calcutta, 1880), pp. 145-57.

Monmohan Chakravarti, 'Certain Unpublished Drawings of Antiquities in Orissa and Northern Circars', *Jour. Asiatic Soc. Bengal,* New Series, IV (1908), pp. 299 ff.

Bishan Swarup, *Konarka* (1910).

Mano Mohan Ganguly, *Orissa and her Remains—Ancient and Mediaeval* (Calcutta, 1912), pp. 437-83.

Mārg, XII, no. 1 (1958).

Nirmal Kumar Basu, *Kaṇāraker Vivaraṇa* (in Bengali), 2nd ed. (Calcutta, 1961).